

Authentic transitions: The Click Around ECU on-line transition to university program



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***Abstract:** Effective transition to university prepares students for successful undergraduate experiences. In this sense, quality learning at university starts well before enrolment with the transition process – the subject of this paper, which describes a pilot, on-line, transition project entitled Click Around ECU (Edith Cowan University). The aim of the pilot study was to assess the organisational and technical feasibility of the project. The uniqueness of Click Around ECU is that it sought to empower high school pupils to decide for themselves what school-leavers want to know about university life through the production of their own Web-based, multimedia clips (Webshows). In so doing, it engaged high school pupils and university students in a series of authentic learning experiences. After contextualising Click Around ECU in the literature about the transition process, this paper provides a description of the project, including software information. It then outlines the organisational features of the project before discussing outcomes and evaluation. The specific aims of the concluding analysis are to explore the manner in which Click Around ECU models authentic, on-line learning and the possible application of the project in rural, remote and international settings.*

***Key Words:** on-line. transition, authentic learning*

Effective transition to university prepares students for successful undergraduate experiences. In this sense, quality learning at university starts well before enrolment with the transition process – the subject of this paper, which describes a pilot, on-line, transition project entitled Click Around ECU (Edith Cowan University). The uniqueness of Click Around ECU is that it sought to empower high school pupils to decide for themselves what school-leavers want to know about university life through the production of their own Web-based, multimedia clips (Webshows). In so doing, it engaged high school pupils and university students in a series of authentic learning experiences. After contextualising Click Around ECU in the literature about the transition process, this paper provides a description of the project, including software information. It then outlines the organisational features of the project before

discussing outcomes and evaluation. The specific aims of the concluding analysis are to explore the manner in which Click Around ECU models authentic, on-line learning and the possible application of the project in rural, remote and international settings.

The transition to university is a complex and diverse process that is difficult to encapsulate in a single definition. The experience varies in accordance with the students' backgrounds and the nature of the institutions in which they enrol: International students, for example, encounter particular problems associated with cultural differences. Given the complexity of the process, it is important to clarify that this paper focuses on the transition process for Australian school-leavers entering Australian universities.

The transition to university is an important matter to address because it affects the well-being and success of young people. Peel's qualitative study (2000: 29) documented just how difficult the transition can be at a personal level: 'I just felt so alone and on my own when uni started. It is so impersonal and hard to know where to find help if needed'. Such experiences of transition have bureaucratic and budgetary implications because they affect retention and attrition rates. It therefore affects the nation's purse. To illustrate this, a British government report (HEFCE 1997) estimated the cost to taxpayers of attrition rates in higher education at around ninety million pounds per annum. Needless to say, statistics like this have caught the attention of governments and academics. In Australia, for example, the Commonwealth Government commissioned projects on the first-year, university experience (Mcinnis & James, 1995). The level of academic interest may be gauged from the fact that a whole edition of the *Journal of Institutional Research* (Vol 9 (1), May 2000) was devoted to the transition from high school to university.

The literature identifies a range of social factors affecting the transition to university. Evans (2000: 1) concluded that:

These studies suggest that students' persistence and performance are related to their background characteristics, disposition on entry, goal commitment and experiences after entry – including academic and social integration – as well as external and institutional factors.

Cultural and linguistic diversity, gender, age and social class are commonly noted among factors affecting transition (Everett and Robins, 1991, Birrell, 1994, Shah and Burke, 1996). Elsworth and Day's (1983) earlier study indicated that rural students were less inclined to accept university places than their metropolitan counterparts. The extent to which place of residence is important as a variable in the successful transition to university is complicated by factors such as socio-economic status, because it is expensive for rural students to live away from home when attending metropolitan universities. Even so, the inclusion of rural location as an issue in transition is important to the Click Around ECU pilot project because of its possible application as a Web-based transition tool in rural high schools.

Successful transition has been linked to the type of school attended and to students' prior performance at school (McClelland and Kruger, 1993). Among the psychological characteristics noted as affecting successful transition are academic preparedness and locus of control. The latter was an important feature of the Click Around ECU project because its aim was to enhance students' understanding of university life in advance of enrolment. Its specific purpose was to facilitate a sense of control and ownership over the process of transition by creating opportunities for students to construct their own knowledge about university life.

Strategies to ease the transition to university are many and varied. These include: orientation programs; counselling; academic support; and mentoring. Universities are increasingly using Web sites to pave the way to a successful university career. These have been used in differing ways as Webb (2000: 228) noted:

While most of the US websites dealing with students' initial transition are based on the premise that staff and students will meet face-to-face in a forthcoming campus-based orientation program, the University of Queensland's <http://www.sss.uq.edu.au/isweb/> offers "stand-alone" information in a questions-and-answer format . . .

Web-based or not, most of the described transition strategies have been designed to form part of the first-year, university experience. In contrast, some commentators (Pargetter 2000: 14) have directed attention to the importance of school years, in particular the last year, in easing the transition to tertiary education. The Click Around ECU project follows this line of thinking, for it engaged senior, high school pupils in a competition to develop Web-based, multimedia clips about university life. Informed by authentic learning philosophy the competition was organised in a manner that actively engaged students in making their own multi-media clips (Webshows) by using material from an existing university Web site.

Background to the Click Around ECU Project

Click Around ECU arose from an earlier project entitled Race Around ECU (RAECU), modelled on the Australian Broadcasting Corporation program, 'Race Around the World'. The RAECU project ran for two years and involved senior Media and English pupils from eight Perth high schools in a competition to make videotaped documentaries about university life. The competition was designed to mesh with the objectives and expected outcomes of 'Media' and 'English' curricula in Western Australian high schools. As part of the process, the high school pupils were linked with ECU Ambassadors – university students who guided the high school pupils to relevant topics, and shared their own experiences of university life. This was an important feature because it provided an authentic setting in which the university students could enhance interpersonal skills as well as fulfil duty-of-care obligations when high school pupils were filming on-campus. The RAECU competition concluded with a Gala Night at which the four-minute documentaries were screened before an audience of pupils, parents and teachers. Prizes were awarded in a range of categories, and all high school pupils received a certificate of participation for inclusion in their career portfolios. University students were provided with a letter of recommendation detailing the generic skills gained through their voluntary participation in the project. For some of the university students their involvement was an authentic learning experience that was assessed as part of their undergraduate programs.

Tangentially, Interactive Multimedia students at Edith Cowan University, who were enrolled in a Project Management unit, were required to find authentic learning opportunities in which to develop a Web site to client specifications and to demonstrate project management skills. A group of these university students agreed to develop a Race Around ECU Web site to support the RAECU project. This RAECU Web site (<http://www.ecu.edu.au/pa/raecu/index.html>) was designed to scaffold high school students' transitional knowledge and to enhance their confidence and readiness for university. It was organised in terms of questions rather than answers, thereby guiding high school pupils to interrogate the material on the Edith Cowan University Web site. The '5W,H' questions were deployed as a framework: **Who? Where? What? Why? When? How?** Ready-made teaching and learning strategies were included to

assist teachers with the use of the RAECU site in their classes. These strategies included pupil-centred and enquiry-driven activities (<http://www.ecu.edu.au/pa/raecu/teach.html>).

Click Around ECU: The Software

One of the Project Management students, Jack Seddon, incorporated a 'Webshow' feature in the RAECU Web site that enabled high school pupils to investigate, on-line, aspects of university life and to use this material to produce a multimedia clip about university. The authoring software used to construct a Webshow is Windows Media Tools 4.1, a free-to-download collection of tools including Windows Media Author (<http://www.microsoft.com/windows/windowsmedia/technologies/resource/tools.asp>). High school pupils can use Windows Media Author to combine data, such as images and audio, with Universal Resource Locators (URLs – Web page addresses) and even scripting commands. This means they can create interactive, audio-visual files that can take a user to a Web site anywhere on the Internet or an Intranet.

The simplest form of a Webshow is constructed on a time-line by adding a sound track (wav file), an URL or a picture file (bmp or jpeg), or a mixture of them. Cue points may then be inserted on the time-line at desired transition times. Each of the cue points can cause the viewer's browser window to jump to an URL. These URLs can be anywhere on the Internet, local computer, or CD-ROM. On completion the developed Webshow is saved as a project file with the extension .AEP. The project file is then compressed to produce a single, Web-capable, streaming media file with the extension .ASP. It may then be linked to a Web page. When a user clicks on the link the Webshow will play or stream from a server over the Web and play back on Windows Media Player.

The task of this pilot project was to work with high school pupils and teachers to assess the feasibility of using this technology. To do this, a small-scale competition was run between selected high schools. Pupils were invited to develop their own Webshows and the process and the product were closely monitored by staff and students in the university and in the high schools.

The Organisation of Click Around ECU

In 2001, the Click Around ECU project was funded by Edith Cowan University's Office of Marketing and Public Relations, thereby demonstrating that creative partnerships between non-academic sections of the university, teaching departments, and high schools can lead to authentic learning experiences for students. The key organisational features included the following steps.

1. A reference group was developed comprising teachers from government and non-government schools to:
 - ✓ develop the project design;
 - ✓ assess the project material;
 - ✓ analyse the process of implementation;
 - ✓ monitor the implementation; and
 - ✓ evaluate the project.
2. A range of outcomes, tasks and assessment criteria in 'Personal Information Technology', 'Industry Information Technology', 'Interactive Media', and 'Digital Media' units, as detailed by the Western Australian Curriculum Council, were embedded in the project.

3. Senior pupils from selected high schools were invited to explore university life by constructing a four-minute, multimedia clip (Webshow). The project was designed to take pupils no more than five weeks to complete. Their tasks were to:
 - ✓ compile a set of URLs from the Internet that tell a story about the transition to university. In essence, the pupils were invited to ask their own questions about university life; and
 - ✓ produce a complementary narrative sound track.
4. Resources were developed and made available to schools and their pupils. The Edith Cowan University Web site was used by pupils as a resource to gather information relevant to them. A CD ROM (which includes all files that needed to be accessed by pupils) was provided as a template for their use. Further, a 'Webshow Demo' was located at www.ecu.edu.au/pa/raecu/Webshow/startdemoshow.html. In addition, each school was supplied with an information pack which contained:
 - ✓ a formal invitation to the principal and an outline of the competition;
 - ✓ relevant acknowledgment and consent forms;
 - ✓ a design brief incorporating appropriate Curriculum Council outcome statements and individual or group project tasks;
 - ✓ details of criteria and assessment;
 - ✓ details of the award ceremony;
 - ✓ a set of procedural instructions, a list of files available for use on the CD and some basic 'how to' instructions; and
 - ✓ submission instructions.
5. School visits were undertaken by the project officer and the Webshow template designer/technical adviser. Monitoring of the project occurred through regular telephone and e-mail communication with classroom teachers, and a bulletin board. This was maintained by the technical adviser to respond to high school pupils' questions.
6. Following the schools' evaluation of completed Webshows, those considered to meet the criteria were submitted for judging. The judging panel consisted of:
 - ✓ the project officer;
 - ✓ the Webshow designer;
 - ✓ a representative of ECU Office of Marketing;
 - ✓ a 'Technology and Enterprise' expert from Edith Cowan University; and
 - ✓ a practising teacher.

The judges were given an information sheet outlining the criteria, as well as a detailed score sheet.
7. Participating pupils, their teachers and parents attended a prize-giving ceremony, which was integrated into the Technology and Enterprise State Conference 2001. Some of the high school pupils' work was demonstrated and, later, selected pupils and teachers conducted a workshop for conference delegates.
8. A final evaluation of the project was undertaken by providing teachers with a brief set of questions to consider prior to informal interviews with the project coordinator.

Outcomes and Evaluation

The product

Did the authentic learning experiences inherent in the Click Around ECU competition work for pupils? The outcomes reveal that high school pupils advanced their understanding of interactive multimedia skills and university life. They went well beyond the basics to produce

complex Webshows that incorporated important information about the transition to university. Examples of the high school pupils' work may be seen at http://www.ecu.edu.au/pa/raecu/clicks/clickshows_2001p.html . In general, the Webshows indicated that high school pupils were attracted to high profile areas of university life such as sport and the Western Australian Academy of Performing Arts (WAAPA@ECU). Beyond that, they drew an all-round picture of university life focusing on campus location, the application and enrolment process, accommodation, and the changes they would face in the transition from school to university. Some chose to show Edith Cowan University in its Perth setting, which has prompted the project organisers to consider the application of the project to international audiences. The high school pupils used a range of devices to engage the attention of their peers. Some Webshows were factual. Others used humour and one group produced an animated character to narrate their show (Edward Cecil Ugenheimer - He's a bit of a nerd, but he's a smart nerd and he knows what he's doing . . . sometimes!) It was clear that their view of a 'quality conversation' about the transition to university includes straight talk. There were no sycophantic overtones in the Webshows.

The process

This was a pilot study so it was important to engage both teachers and pupils in evaluating process as well as product. Participating teachers identified the following as the major benefits arising from their pupils' involvement in the competition process:

- ✓ pupils worked on a real-life task rather than one manufactured or simulated by the teacher;
- ✓ the competition was relevant to pupils' interests and needs because it involved self-directed learning about multimedia skills *and* the transition to university;
- ✓ the project fitted the curriculum and provided a ready-made design brief for teachers; and
- ✓ teamwork and the adoption of specific roles by pupils within each team was essential to complete the task.

Problems noted in the evaluation were as important as successes. Three of the schools withdrew from the project for a range of technical reasons. These problems were addressed with the remaining schools and will be incorporated into the planning of future projects to avoid the recurrence of similar difficulties. Recommendations from the teachers for future projects included the following suggestions:

- allow pupils to create their own Web pages;
- allow schools to use their own authoring software;
- make the instructions more user-friendly; and
- limit the number of pages for project completion.

Student feedback was positive. Comments included:

- ✓ *I've changed my mind now and intend to go to university. (3 pupils)*
- ✓ *We had to really work together to get it finished in time.*
- ✓ *I feel confident about the narrative – it's not something we've done before.*
- ✓ *We chose roles we knew we were good at – like he's good at writing.*

Overall, they enjoyed participating in the competition and learning something of university life. Students from one of the participating schools subsequently joined with their teacher to present a paper at a Western Australian Technology and Enterprise conference. Their presentation demonstrated a high level of enthusiasm as well as solid learning outcomes.

Click Around ECU as an Authentic Learning Experience

The informing philosophy of the Click Around ECU competition was authentic or situated learning, which means that it relied:

heavily on constructivist learning principles which encourage learners to construct their own meaning for knowledge and information in the learning process. Furthermore, situated learning recognises the importance of interaction and socialisation among learners as a critical element in the learning process. (Oliver, Herrington and Omari,1998:2)

According to Herrington and Oliver (2000), the essence of authentic learning may be found in the qualities and features of learning that unite knowing and doing. In their view, situated learning environments:

1. provide *authentic contexts* that reflect the way the knowledge will be used in real life;
2. provide *authentic activities*;
3. provide access to *expert performances* and the modelling of processes;
4. provide *multiple roles and perspectives*;
5. support *the collaborative construction of knowledge*;
6. promote *reflection* to enable abstractions to be formed;
7. promote *articulation* to enable tacit knowledge to be made explicit;
8. provide *coaching* and *scaffolding* by the teacher at critical times; and
9. provide for *authentic assessment* of learning within the tasks.

Herrington and Oliver’s nine dimensions of situated learning accord with what has been called ‘Knowledge Age’ learning practices. Trilling and Hood (1999:11) noted that in moving from an industrial age to a knowledge age, learning practices have undergone the changes to authentic, knowledge-age learning itemised in the following chart.

Industrial Age	Knowledge Age
Teacher as director	Teacher as facilitator, guide, consultant
Teacher as knowledge source	Teacher as co-learner
Curriculum-directed learning	Student-directed learning
Time-slotted, rigidly scheduled learning	Open, flexible, on-demand learning
Primarily fact-based	Primarily project and problem-based
Theoretical, abstract	Real-world, concrete
Principles and surveys	Actions and reflections
Drill and practice	Inquiry and design
Rules and procedures	Discovery and invention
Competitive	Collaborative
Classroom-focused	Community-focused
Prescribed results	Open-ended results
Conform to norm	Creative diversity
Computers as subject of study	Computers as tool for all learning
Static media presentations	Dynamic multimedia interactions
Classroom-bounded communication	Worldwide, unbounded communication
Test-assessed by Norms	Performance-assessed by experts mentors, peers

Despite the clear summaries provided by educationalists such as Herrington and Oliver (2000), and Trilling and Hood (1999), ‘authentic’ and ‘situated’ learning remain contested concepts. For example, Hummel (1993:15) disputed the use of the term ‘situated’ learning in a computer-based environment because he maintained that ‘courseware becomes the learning environment and not the authentic situation’. However, the Click Around ECU project blurs the boundaries of this debate because the computer-based environment formed part of the learning experience. It was the subject, context and tool of learning. Indeed, great care was

taken to incorporate into the competition the learning objectives of the technology and multimedia curricula in high schools.

There were, in fact, two levels of authentic learning taking place in the Click Around ECU project. The aim was to learn about multimedia presentations in an authentic way. At the same time, pupils were engaged in constructing their own knowledge about university life. A key point is that the project was scaffolded so that pupils generated their own questions. The bulletin board was well used by pupils enquiring about process, the technology and university life. Their questions have been archived on the RAECU Web site bulletin board (<http://www.ecu.edu.au/pa/raecu/index.html>) to keep a record of the issues that caused them to question. This will be useful in the development of future projects of this nature. Herrington and Oliver (2000) noted that authentic learning promotes ‘*articulation* to enable tacit knowledge to be made explicit’. The Click Around ECU project did oblige high school pupils to make explicit their thinking about post-secondary education. Indeed, one group of pupils chose to interview some of their peers about university life:

Q1. What do you expect University life will be like?

A (summary). *fantastic social life*

Q2. What are some of the big differences do you think between school and university?

A (summary). *a choice of whether to attend classes . . . much bigger class sizes*

Referring to the criteria of authentic, knowledge-age learning established by Herrington and Oliver (2000), and Trilling and Hood (1999), pupils in the Click Around ECU competition worked collaboratively, to real-world specifications. Yet, the results were open-ended and each of the four-minute Webshows had different content and tone reflecting the creativity of students in self-directed projects. Their teachers joined them on the journey as facilitators. The product of the students’ work was initially peer-assessed in schools and later by experts. The resources were Web-based, rather than classroom-bound and underpinned by enquiry rather than ‘drill and practice’ modes of learning.

The success of the project has inspired the project coordinators to consider possible future opportunities for authentic learning about the transition to university. Current ideas include developing similar projects for rural students because they remain disadvantaged in terms of access to university. As Elson-Green (1999) reported:

A university education continues to be an elusive dream for some of the most disadvantaged groups in Australian society despite years of equity programs aimed at giving everyone a ‘fair chance’. The Equity in Higher Education study released last week reveals the university system is failing indigenous students and people from rural, isolated and low socio-economic status (SES) backgrounds.

The Click Around ECU concept provides a wonderful opportunity to work with rural and remote students because physical access to campus life is unnecessary in the development of Webshows. Rural high school pupils can get all the information they need from the Web and can communicate with the organisers via the bulletin boards. Similar extensions of the concept for use with international students, prior to their arrival in Australia, are under consideration.

In conclusion, orientation to university life frequently involves a didactic process in which those in-the-know teach the uninitiated. The subject matter is determined by the university. In contrast, the Click Around ECU project created authentic learning opportunities for high school pupils to construct a story about university life in beginning with their own knowledge

base of the content and expanding it by choosing their own research focus. They were the constructors of the learning. Students involved in this project had to develop effective strategies within the medium in order to be artful storytellers and to engage their audience. The proof is in the pudding! Their Webshows were funny and informative and will continue to be used by staff in schools and universities to ease the transition to university.

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