History for Designers: engaging first years across disciplines

Dr. Alethea Blackler and Dr. Jeannie Sim
School of Design, Queensland University of Technology, Brisbane, Queensland, Australia

ABSTRACT
A new course meant an opportunity to regenerate how design history is introduced to first year students in several disciplines, including architecture, industrial design, interior design and landscape architecture. With a trans-disciplinary teaching team, we aimed to make history relevant and interesting to everyone, avoiding the usual errors of deluges of dates or complicated historiographical or design theories. Our first delivery of this new unit 'Introducing Design History' in 2006 was successful and students became hooked on history. We are still excited about the future and eagerly implementing improvements for 2007. We know why it worked: the content and delivery worked in tandem; the teachers were enthusiastic and sincere; the teaching approach was well prepared and carefully aligned. Keeping it real and vibrant and encouraging a deep approach to learning are the keys for effectively teaching history to first year designers.

Introduction

We are the team leaders for a new first year unit in the new course of Bachelor of Design at Queensland University of Technology (which started in 2006). Our students are drawn from all four disciplines in the School of Design – architecture, industrial and interior design and landscape architecture – and also from 2nd and 3rd year students (from many other disciplines) studying minors and sub-majors in design. These extra students make up around 10% of the cohort in 2007, so 90% of the students are 1st year design students. This unit is an important aspect of the first year experience for design students at QUT as it is something they all have in common for their very first semester. Along with other first semester units it sets the scene and shapes their expectations for the rest of the course, and can help to develop study skills and habits that will serve them throughout their lives.

Over the past year we have engaged in personal scholarship to improve our teaching, which has been an exciting challenge. Biggs (2003), acknowledging the problems of new style university teaching – less academic students and larger classes – discusses ways in which university teachers can ensure quality learning. Biggs, along with many others, bases his ideas on the deep and surface approaches to learning, which have been investigated worldwide by many researchers and show great similarities across age and cultural groups (Ramsden, 2003).

A deep approach involves theorising, applying and relating, not simply memorising and note-taking, which are surface levels of engagement. Ramsden (2003) explains that all students are capable of both deep and surface approaches, and which one they use is dependant on the task they are undertaking. Ramsden (2003) also claims that deep approaches are more challenging and satisfying, leading to true understanding, while surface approaches are disastrous for
learning. In humanities-type subjects like history, surface learning may manifest itself as a generalised and vague approach, oversimplification of ideas, and memorising unrelated generalities during exam preparation. For example, Biggs (1988) showed how surface approaches to history essay writing restrict the quality of the outcome while deep approaches allow an opportunity for high quality outcomes.

All components in the teaching and learning system need to be aligned to encourage this kind of deep approach. These include us as lecturers, the students, the curriculum, teaching methods, assessment procedures, the climate created through interactions, and the institutional climate. Imbalance will lead to poor teaching and surface learning. Particularly important are curriculum, teaching methods, and assessment procedures (Biggs, 2003). When there is alignment between what we want, how we teach and how we assess, teaching is likely to be more effective. Criterion Referenced Assessment can help to achieve the alignment between objectives and assessment, but Biggs (2003) believes teaching methods must also be appropriate to the subject matter. This is where constructivism comes in. Constructivism proposes that what the learner has to do to create knowledge is the important thing. The acquisition of information does not change the students’ world view, but the way they structure that information and think with it does. Meaning is created by the learner and constructivism focuses on the nature of the learning activities that students use.

Therefore, Biggs (2003) espouses a system called constructive alignment, based on the principles of constructivism in learning and alignment in teaching. Constructive alignment means using constructivist theory as a theory of learning to help decide what teaching methods to use. In aligned teaching there is maximum consistency throughout the system. The curriculum is stated in clear objectives, including the level of understanding required, teaching methods are chosen to realise those objectives and assessment tasks address what the objectives state the students should be learning. Because of this consistency, there is greater likelihood that students will engage in appropriate learning activities, constructing their knowledge their own way.

This paper examines how we approached creating this new unit, how we designed our curriculum and teaching and learning activities using constructive alignment to encourage a deep approach to learning, and relates the various successes and stumbling blocks we have encountered. We are still learning while we experiment with implementing new, more effective approaches.

Agreeing on Objectives

We planned ahead early, beginning the process of preparation in August 2005 to be ready to teach the first cohort (400 students) in late February 2006. Through collaborative efforts from permanent staff and other professionals, we refined all aspects of the unit’s goals, content, delivery and assessment. We were lucky enough to have a fairly large team of five people for preparation due to the involvement of interested colleagues from each discipline in the school. Together we went through a long and highly collaborative preparation process, including quality time spent getting to know each other and having fun discussing history, and lots of discussion about the aims of the unit and what students would need to know. We agreed on the following list of basic approaches to teaching design history:

- Getting students excited about their future in design by celebrating the wonders of the past
- Avoiding 'chalk and talk' or 'slides and waffle' style lectures with lists of dates
• Providing opportunities for interaction and activities; getting them thinking WITHIN the class
• Promoting books as treasures to hold, look at, and read from; getting to know libraries and archives and other repositories of knowledge; putting the Internet in its place as ONE option for reference (not the only way)
• Giving them a framework of historical understanding within which they could position their future studies of design and design history.
• Establishing respect for differing points of view, other design disciplines, other cultures, indigenous Australians, other economic classes, other genders, different physical or mental abilities, etc.
• Promoting respect for the environment and nature as a whole
• Promoting respect for historic places and things, recognizing the values of cultural heritage and natural heritage
• Getting them passionate about design and about history as a way of understanding and improving practice today
• Getting them so excited they want more and go and look for more themselves
• Maybe even getting them involved in conservation matters or historical research.

From this exercise we put together these more traditional unit objectives, which were approved by the faculty and university and then published to the students:

By the completion of this unit you should be able to demonstrate the following specific capabilities at beginning level:

1. an understanding of the relevance and purpose of the study of history to the practice of design, in particular architecture, industrial design, interior design and landscape architecture
2. a fundamental knowledge of design history facts, including names of significant designers/artists/architects, major movements/styles, key historical periods, and other relevant terminology
3. an understanding of the linkages among ideas, theories, events, social values and customs, art, aesthetics, technology, materials, the built world and the natural environment, and their influences on design change in history
4. an ability to critically analyse historical sources and develop well-considered, logical, written responses and argument concerning design

We then agreed who would actually manage and deliver the unit and agreed on tasks for each team member well before that start of semester. This division has worked extremely successfully ever since.

Applying the theory

When students feel they need to know, they automatically try to focus on underlying meaning, main ideas and themes. This requires a sound foundation of relevant prior knowledge so students needing to know will naturally try to learn the details as well as the big picture. This is a deep approach (Biggs, 2003, Ramsden, 2003). We try to instil this need to know through enthusiastic and interesting lectures and plenty of relevant examples, which Ramsden (2003) considers could help to support a deep approach. However, there is more to encouraging a deep approach than simply motivating students as levels of motivation and interest will vary along with academic ability. For deep approaches the students typically need to be more active in their learning, so we needed to encourage a deep approach through appropriate learning activities. Biggs recommends using constructive alignment to ensure more students adopt a deep approach. We adopted this idea in the way we designed the curriculum and organised the delivery and assessment of it.
Developing Content

The first breakthrough with the determination of content was to reject the chronological narrative as the structure for lectures and tutorials. A historical review of any one of the disciplines takes more than one semester to be reasonably comprehensive; covering all four design disciplines together is impossible. With the knowledge that later units in second or third year would provide this depth of understanding of their own profession, our goal was to introduce the basics of history. We began with the traditional journalist's search goals (the basic questions of What? When? Why? How? Who? and Where?). We then added a more detailed insight into each of the four disciplines with one session for each under the banner of 'Design Heroes' (called ‘design leaders’ in 2007) Lastly, we added the topics of heritage conservation and speculative future history. These themes provided a very effective platform from which to build theory and practice covering visual design forms and historiography.

The six journalist's questions were ways of presenting core ideas about history. 'What is history' introduced historiography, different types of history and historians, and varying viewpoints of interpretation. 'When is history' included marking time with historical eras and periods, using chronologies and timelines, and understanding 'modern' and 'contemporary'. 'Why change happens' examined influences on design (ideas behind ideas) including human needs, cultural mores and customs, philosophy, spirituality/religions, politics, economics, science and technology. 'How is history' included concepts of stylistic categories, movements, typologies, innovation. 'Who in history' stressed that people matter, as designers, users, makers and keepers. 'Where is history' stressed the importance of place, such as different climatic or geographical influences, attitudes to nature, availability of materials, differing cultures, vernacular and craft design. Illustrations – evocative images and stories – of these ideas were of crucial importance throughout, to keep the students' interest and to help them relate the theory to their own disciplines and experiences.

The selection of three or four influential designers from each discipline was aimed at revealing how design history is interrelated and to generate better appreciation about each discipline. The heritage topic was another way of presenting history as real and relevant, by applying the theory to the practical management of historical items and sites. Finally, the future history topic was the closing lecture of the semester and presented some speculators and speculations on design futures.

New Outlooks

In line with the constructivist principles, we wanted to change the way the students see the world. Learning is best conceptualized as a change in the way a student understands the world around him/her (Ramsden, 2003). Our aim was to give our students a historical framework on which they could subsequently build an understanding of their disciplines. We felt that many of them did not have sufficient understanding of history to allow them to hang facts, images, names and dates on, to be able to look at something and have an idea of its style or era and how that related to others. Indeed, when we asked a sample of 198 students (around 40% of the 2007 cohort) whether they had previously studied any kind of history at high school, college or university, only 37% said they had. Therefore, they need a chronologically-based framework where they can relate eras, styles, movements, people and cultures to each other and start to understand how they all inter-connect. Although we do not teach with a chronological approach, they do need to end up with some chronological understanding, so the way we attempt to facilitate this is by asking students to construct a personal timeline on
which they include the eras, dates, designers and designed objects they learn about during the semester that they feel are relevant to their discipline.

Getting them to go deep on this is hard. In 2006, some students simply downloaded existing lists from the Internet, while others included minimal information or irrelevant items. Many did not maintain work on the timeline throughout the semester. This task has been given greater emphasis in 2007 with a suggested template for the timeline provided (including examples and an emphasis on citing sources), more structured timeline activities built into the program, and continual reminders to students to update their personal timelines as they learn relevant things from lectures, readings and tutorials.

**Delivery and Management**

The unit is delivered through a combination of a lecture (2 hours) and a tutorial (1 hour) per week during the 13 week semester. Each week the lecture, tutorial, tutorial “homework” activity and reading are all linked through that week’s theme. Each week’s content is designed to follow smoothly from and build on that from previous weeks.

We make good use of the online teaching resources for lecture, tutorial and class management activities. Most of the lectures are prepared in advance before the start of semester and are available in the form of essays and illustrated PowerPoint presentations for students to copy from the online teaching resource and CD-ROMs in the faculty resource centre. Tutorial activities are available for students to download. Advice and outlines for assessment activities, FAQs and links to suggested websites are available on the unit website, and we use email notices to communicate important information to the whole class. Set readings that are not in the set books are also available for students to access on the QUT Course Materials Database (CMD). Our key goal in managing communication is to reassure the students that they are not alone; we are here to help, we are approachable and we have set up resources that they will find useful.

We expect students to read from several sources to successfully carry out the tutorial activities and other assessment pieces. For 2006, we set three short texts as mandatory: Heskett (2002) (141 A6 pages), Ballantyne (2002) (126 A6 pages) and Cope (2005) (78 A5 pages). For 2007, we have swapped Ballantyne (2002) for Sutton (1999) (375 A5 pages), which provides more of a chronological narrative to complement the theme-based approach of Heskett (2002), and also has numerous illustrations which should help students to fix pictorial images to key concepts. In 2007, we have included a new recommended text on our list: Wallace, Schirato and Bright's *Beginning University* (1999). This is a brilliant introduction to all the basics of university life and learning for first year students. We found the preliminary discussion background explaining what universities are all about very clearly expressed, relevant and useful. But even more valuable were the chapters on learning strategies, critical thinking and other basic skills such as research, writing and oral presentations. It is the sort of book we wish we had when we first arrived as students.

**Lectures**

While lectures and lecture notes are traditional forms of teaching and support materials, the content and delivery is what makes them more effective. While maintaining a sense of
enthusiastic authority, we speak entertainingly in lectures and notes with interesting stories and tidbits of trivia that awaken the students’ alertness and leave them craving more. Encouraging student responses and discussion during these large lectures is a challenge and usually rests with short answers to direct questions. Similarly, some of the tutors and both of us are present at all lectures so some interaction between staff (with off-the-cuff asides and embellishments) provides a successful break in the typical monologue approach to lecturing. Each lecture is introduced with an interactive session (for example, slides presenting buildings, objects, interiors and landscapes for students to identify in an informal quiz). Despite the huge cohort of students this works well and each answer has an engaging story behind it, so students can see how interesting and relevant history can be. A striking introduction like this allows students to become engaged and leads them into the lecture proper (Biggs, 2003).

Bringing the theory or historical principle to life for design students is about making the facts relevant to them. We wrote in the week one introductory handout:

Design history is not an obsessive checklist of dates and events, people and places. Understanding the history of design is like reading a good detective novel that has exciting elements of fantasy and philosophy mixed throughout. There are insights into why things happened, how they happened and descriptions of what everything looked like. The best thing about understanding history is that you as a designer can make great use of this knowledge and appreciation. History can feed your creative juices and sustain your passion about design!

This message is stressed in all lectures and most tutorials. Our own passion in delivering lectures and running tutorials reinforces these intentions. Preparing the lectures prior to semester starting means that during the week proceeding each lecture we have time to reflect on how to best present the materials, rather than rushing to put the content together. It also means less stress during the semester. Now we are on the second iteration of the unit the time invested in preparation of lectures and tutorials has really paid off.

For 2007, we have also introduced a new aspect to our lecture sessions: the 'Tech Talk'. For 15-30 minutes we introduce some basic skills (reading, referencing, critical thinking, planning essays, writing, etc.) and draw from Wallace et al. (1999), the excellent resources provided online by QUT Library and QUT's Teaching and Learning Support Services, and other sources. We believe this new approach will address concerns raised in 2006 about the lack of basic instruction and help provided in these fundamental skills. We hope to see a marked improvement in the quality of assignments resulting from this sound groundwork.

Keeping the students' attention can be a challenge, so one of us delivers most of the tech-talks while the other continues with most of the history lectures, then we swap when appropriate. Our strategies here are supported by educational theorists, such as Biggs (2003), who shows that students can concentrate much better if allowed to have a break and/or change of activity during lectures. With a two hour lecture session, we have used several techniques to achieve this. We change topic and presenter by including both a tech talk and a lecture each week, we change pace during the lecture by moving from the interactive introduction to the more traditional lecture proper, we give them a short break at approximately the halfway mark, and for 2007 we have also included clips from the “Worst Jobs in History” TV series (Channel 4.com, 2005). These clips show some of the tasks that people had to do in order to allow historical artefacts and places to be produced – for example cathedral building, cloth dying, pin making, raw material mining and refining. This is intended to counteract the picture of history that design students often get of a very few well-known designers and their famous
creations, and to allow them to build a real sense of history by encouraging them to empathise with normal people from the past rather than just identifying with design ‘stars’.

Biggs (2003) also demonstrates that encouraging students to consolidate what they have learned during the lectures increases their retention of the lecture content. We are already doing this through asking them to enter events or items from the lecture into the timeline, and through the tutorial activities. However, we plan to try setting students a puzzle at the end of each lecture which will require them to think through what they have learned and review their notes. Answers to the puzzle will be revealed at the following lecture.

_Tutorials_

These more intimate gatherings (with 26 students maximum per group) enable class activities that reinforce and extend the information presented in lectures. All activities are designed to align the lecture and assessment content with the unit objectives and the assessment criteria. Tutors are selected from all four disciplines within our school and from art history, and are either full time staff, active professionals or research students. Many have taught on similar units before, and most tutors teach two groups each week. This enables us to maintain a smaller group of more expert tutors which is easier to manage, and allows tutors to get more value out of the time they invest in getting to know the materials. We both also act as tutors of one group each, which helps us be part of the process and understand better the difficulties and triumphs faced by tutors.

We have compiled a thorough briefing document (Tutor pack). This includes clear guidelines for tutors on what to expect (eg what is included in pay), what to do when and how and week by week tutorial plans to follow. All tutorial plans are prepared in detail before the start of semester, so that tutors know exactly what activities to run, why and when. The success of this ‘Tutor's Pack’ was proven when several lecturing colleagues adopted it for their units. We hold a briefing session for tutors at the start of the semester, assessment moderation meetings during the semester, and a de-brief at the end. These meetings prove most valuable in troubleshooting – correcting glitches and reinforcing effective teaching and assessment approaches. Tutors have commented that the tutorial activities are well-prepared and effective and the information they are given is extremely useful.

_Assessment_

“The methods we use to assess students are one of the most critical of all influences on their learning” (Ramsden, 2003: 67). Many assessment methods do not test understanding and so students can pass courses through utilizing a surface approach to memorise facts and never in fact attain the understanding they were intended to acquire (Ramsden, 2003). Assessment tasks need to be of high quality and aligned with the unit objectives in order to illicit a deep approach (Biggs, 2003).

In 2006 there were three pieces of assessment: a history journal (30%), an essay (40%) and a multiple choice examination (30%). The journal was intended as a record of the tutorial activities and to contain evidence of reflection by the student. The essay was aimed at developing investigative and analytical skills as students sought to explore ideas of values related to one of four ‘iconic’ designed items or places (British Houses of Parliament, Barcelona Chair, Hill's Clothes Hoist, or Central Park in New York). The final examination
was a check on overall absorption of key ideas and facts. Formative assessment by tutors was carried out on the journal and the essay preparation.

While this mixture of assessment was generally successful, for 2007 we fine-tuned some aspects, including changing weighting of the essay to 30% and the journal to 40% in response to student feedback on respective workloads. Further instruction in essay planning, writing, research strategies, referencing and plagiarism were found to be needed during 2006. To this end we introduced the “tech talks.”

Ramsden (2003) recommends that assessment be seen as the servant rather than the master of the learning process – used as a way of learning and of demonstrating understanding rather than as reward or punishment. Biggs (2003) emphasises the importance of aligning assessment with unit objectives through the design of the content and teaching and learning activities. We have made a big effort to do this. The exam is intended to consolidate the lecture and reading content and to allow students to get a firm grasp of the breadth of the material (unit objective 2: fundamental knowledge of design history facts). The essay allows students to acquire deep knowledge of a particular topic and critical thinking skills, as well as practicing research and writing skills (unit objective 4: an ability to critically analyse historical sources and develop well-considered, logical, written responses and argument).

The journal, which is produced as a result of the tutorial activities and exercises, is designed to allow both depth and breadth, to encourage application of theory and reflection on learning and to allow practice of important skills such as researching and observing, as well as academic reading and writing (unit objectives 2 and 4, and also 1: an understanding of the relevance and purpose of design history, and 3: an understanding of the linkages and theories among ideas, theories, events, social values and customs, etc). Hence, a clear progression can be seen from the objectives to the assessment criteria via the teaching and learning content and activities. Students are learning what we want them to learn and acquiring necessary skills along the way. The assessment is carefully designed and aligned to ensure that this happens.

As the great majority of these students are first years with no prior experience of university study, we have provided “scaffolding” and support for their assessment tasks. For example, for 2007 we provided students with a suggested format structure for the timeline, so that they could see what kinds of things need to be included. Also, we have devoted both a tech talk and a tutorial session to essay planning to make sure that all students understand how to plan an essay and produce an appropriate plan (that is then approved by their tutor). Required contents for the journal have also been provided so that students understand what they need to do each week throughout the semester in order to end up with a complete journal at the end.

This is not spoon-feeding – instead this level of support allows students to understand the tasks required and therefore enables them to engage with those tasks more deeply, rather than skimming the surface. For example, a high quality essay plan produced with the support of the tutor will allow the student to engage with the essay question more deeply and therefore produce a better quality essay, which they may not have been able to do without the planning activity. Similarly, the timeline and journal structures we have supplied are intended to make sure students complete all the work as required rather than missing parts or points that they did not realise they needed to address. The journal takes the whole semester to complete so contains lots of different components and we found in 2006 that students often missed things because they forgot to include them in the journal.
Moderation of marking is undertaken through tutor workshops during the marking process. General agreement is reached on the standard for the extremes of grades and the interpretation of the criterion referenced assessment (CRA) sheets. During these workshops tutors can relate further information about the relative successes and setbacks from tutorial activities and how this transposes into the journal or essay. Overall, for 2006, this communication was most successful and we learnt much from the reliable and dedicated tutors involved. However, we found that we overworked our tutors in the amount of formative assessment we expected, and a reduction has been made for 2007.

_Evaluation_

Our overall approaches have proved very successful, with a Faculty teaching award in 2006 and supportive feedback from both students and tutors describing their enjoyment and appreciation. We are also pleased with the grades students achieved. The average student grade in 2006 was a credit level of 68%. In detail: only 6.1% of the student cohort failed; 26.7% gained a pass, 27% a credit; 24.5% a distinction; and 14.4% a high distinction. The average we got on Student Evaluation of Unit was 3.86 out of possible 5. A small selection of typical comments from student feedback is included below.

“The linking of the Journals to the lectures and readings [was done well and should be continued]. The very interactive tutorials are good as well.”

“To the tutorials are well designed and interesting to attend. Tutor’s feedback also very helpful to improve my work.”

“The link between what is done in lectures and tutorials and the subsequent translation for use in our assessment is extremely well done… I gained immense pleasure from the entertaining lectures and the enthusiastic tutorial discussion and debate. This is an extremely well structured and delivered unit. Thank you to all.”

“…I have found the preparation and enthusiasm in Dr Sim's Lectures to be the most engaging I have experienced. Whilst the Lecture notes are thorough and well adhered to, the theatrics in its delivery has the means to bind the content to memory. I consider this an obviously difficult task for most lecturers over a 2 hour time frame, after 6pm!”

“I have found her [Jeannie’s] manner in class entertaining while her passion and enthusiasm is infectious. A potentially boring subject… has been a delight to explore and I look forward to a new installment each week. Lectures are always presented with in depth notes, a wealth of knowledge and information. I have found every lecture to be always interesting in content as they always cover a sound breadth and depth of design history.”

“I haven’t been to one lecture of Jeannie’s yet when I haven’t left with a smile on my face wanting to learn more. Relating the subject to the audience, and having them feel the need for more, I think can sometimes be quite difficult, but Jeannie manages to do this…”

“I enjoy the lecture I have with Jeannie Sim. She is passionate about the subject she is teaching and although there are elements of the lectures I would at other times find dull, Jeannie's manner makes this information interesting and at times humorous. Also, because of her manner I am able to recall the information at a later date. Her passion and enthusiasm is infectious.”

“I can honestly say that I am enjoying this subject more than any others I have previously studied - mainly due to your enthusiasm & commitment shown as a lecturer (& my tutor too!) to the subject & also to the students. The work that you have produced for this unit (being the lecture slides, complete lecture notes, tutorial plans & exercises) are very comprehensive and not only provide...
plenty of reading material for us to learn from, they are also extremely visually interesting. Your lecturing style...makes learning & studying more enjoyable & memorable!"

These comments show two important things. Firstly, the effort made to make lectures engaging (despite the unfortunate timeslot of 6-8pm we had in 2006) was appreciated. Many students, having expected history to be boring, found themselves wanting to know more. Secondly, students were happy with the organisation of the unit and found the way all the activities were aligned to be helpful. This feedback suggests that we succeeded in encouraging a deep approach in two ways: through engaging and motivating students so that they naturally adopted a deep approach; and through successfully aligning content so that the teaching and learning activities encouraged adoption of a deep approach.

Conclusion

The year 2007 involves an even wider audience for this unit, with minor and sub-major students joining from urban development, creative industries and information technology (total of 530 students). It is a challenge to make our core messages relevant to all the groups through the use of appropriate examples and stories, but we envisage the process as an opportunity to enliven our previous discussion and further broaden the awareness of every student.

Reflective teachers learn from their experiences (Biggs, 2003) and some of our improvements have been mentioned already. Other things we have changed include fine-tuning the Tutor's Pack, Tutorial Plans and Student Guides for Tutorials for maximum clarity and ease of use; and improving or preparing new tutorial activities and 'homework' exercises. Further improvements we are planning for 2008 include incorporation of some of tech talk materials into tutorial activities to reinforce them and link more strongly to unit content. Developing and delivering this history unit has been a pleasurable challenge. Reflecting on our understanding of the educational principles and practice has only increased the positive outcomes, leading to a re-generation of our teaching.

References