In this chapter we discuss a range of examples of social systems used for learning that employ the different social forms we have been speaking of. These are not case studies. Rather, as the chapter title suggests, they are stories, exemplars that illustrate how our model can be used to illuminate different ways of teaching and learning. Beyond that, the stories provide concrete examples of some of the issues and concerns that emerge when attempting to implement a social system for learning, and some of the benefits of doing so.

Our focus will be on a small subset of the systems that we have actively played a part in developing or have created ourselves, each based on the Elgg social framework; a toolset for creating social software environments. This is partly because we know more about these systems than any others, but mainly because they have been informed by, and have informed, our evolving model of crowd-based and social learning. While we have worked with and developed a wide range of other social software systems, these have been either small-scale or constrained by the limits of the tools.

Elgg has provided us with a full palette of possibilities to create a social software environment, and the relatively large-scale institutional uses of these systems have made it possible to examine a broad range of issues that arise. We will begin by briefly describing the context and some of our early attempts to both use existing tools and create our own, and the lessons learned from them. The bulk of this chapter will be concerned with the development and uses of Athabasca Landing, an Elgg-based system that we have been working on for the past three years. It is introduced with a discussion of two Elgg-based systems that we worked with.
prior to that, which taught us some valuable lessons in social software design and management. We will describe uses in both self-paced and paced distance education online courses, and ways that learning has happened outside formal courses, concluding with some observations on the knowledge bridges that have formed between different learning contexts, courses, and experiences.

Learning Management Systems

Like all pioneer online teachers, we have been exposed to and created courses using a variety of computer conferencing discussion boards, initially with static web pages and associated newsgroups, next with learning conferencing systems, and then using early and later versions of multi-functional learning management systems (LMS) or, as they are referred to in the UK, managed or virtual learning environments (MLEs, or VLEs). Indeed, in the late 1990s and early 2000s, author Dron was co-leader of a team that created such a system. It is thus from first-hand experience that we can assert the organizing metaphor of the LMS has always been the classroom. The vast majority of LMSs have been designed to automate and virtualize processes, pedagogies, methods, and procedures that already exist in institutions and business, and are thus quintessential group environments. Learners are typically assigned to groups by the institutional register, and are presented with a host of management, interaction, and content display tools. Notably, these groups are nearly always paced by the instructor and they march along in sync, typically for a semester of study.

LMS systems almost always feature strict role definitions wherein teachers, or in some cases only course designers, add various interaction modules and the content. An LMS is a very different technology to a teacher than it is to a student. Some kind of assignment drop box and resulting gradebook display serves to automate the reception, marking, and return of assignments, along with the transmission of records of student achievement and class participation to the registrar. With rare exceptions, anonymous participation is prohibited and students are forced to be personally responsible for their contributions and comments. The closed nature of the LMS course serves the group well, as it both defines who is a member of the group, and provides a degree of privacy and opportunity for growth of trust. We have often heard teachers decree that “what happens on the LMS stays on the LMS,” and despite the technical capacity for cutting, pasting, and reposting in the public domain, students generally accept the benefits of the closed online context.
The mirror of functionality between the campus classroom and the LMS context is both the system’s greatest strength and weakness. Teachers are presented with online equivalents of classroom activities—discussions, presentations, grade books, quizzes, and so on—that have long been institutionalized and become familiar social architectures of formal education. Thus, there is a relatively familiar learning path along which comfortable patterns can be transformed from face-to-face to online contexts—albeit with the added novelty of mediation and time-and place-shifting. However, this tight transposition from classroom to online also militates against the exploitation of new affordances, notably networks and sets that can be harnessed for social learning online. The closed group environment typically prohibits networks of learners, notably those from other sections of a program, alumni, and those with similar interests and learning needs, from contributing to the learning context. The strict privacy control prohibits sharing and commenting, and thus limits opportunities for social capital growth beyond the immediate group. Commonly, the pervasive enrolment control means that contributions from previous cohorts or knowledge resources built through time scales that extend beyond the course completion date are lost—in effect, every cohort starts the learning journey afresh, with no opportunity to benefit from the insights or learning of students who came before. It does not have to be that way, but given the surrounding organizational requirements and habits learned from centuries of face-to-face teaching processes, it is this path of least resistance that is usually taken.

We are not alone in thinking about, building, and testing systems that “go beyond the LMS,” and in the next sections we discuss our efforts to do so.

**Elgg**

In 2005, Dave Tosh and Ben Werdemuller von Elgg released a social software system based on their research into personal learning environments they called Elgg. The system acquired its name because Ben, whose family name is Elgg, ran a website with that name and that is where the first system first resided. Like many developed at that time, Elgg sought to provide a fairly complete social software solution, including blogs, social networking, groups, wikis, file sharing, social bookmarking, and content curation.

While the early 2000s saw many social software systems emerge, from its inception Elgg had some distinguishing features that separated it from the crowd, at least partly due to its evolution within the context of research into online
learning. Chief among these was an extremely fine-grained, bottom-up set of access controls. There is no single privacy setting that meets the needs of all potential users. What for one user is an inherent right to free expression and an important way to build social capital through creation of an online identity is for others an invasion of privacy. Moreover, these settings must be dynamic, as one blog message may be thoughtfully restricted to a circle of tight friends, or for a teacher, while the next might be addressed to a network, and a fourth meant for reading across the Internet. Thus, each user (and notably not just the teacher) should be afforded the capacity to set the permissions level on everything they create (Figure 8.1).

<table>
<thead>
<tr>
<th>Private (only you)</th>
</tr>
</thead>
<tbody>
<tr>
<td>People you are following</td>
</tr>
<tr>
<td>Logged in users</td>
</tr>
<tr>
<td>Public</td>
</tr>
<tr>
<td>Social Learning</td>
</tr>
<tr>
<td>TerryAndGeorge</td>
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<tr>
<td>special interest</td>
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<td>friends</td>
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<td>SCIS</td>
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<tr>
<td>colleagues</td>
</tr>
<tr>
<td>students</td>
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</tbody>
</table>

**Figure 8.1** Screenshot of Elgg’s fine-grained access controls.

**COMMUNITY@BRIGHTON**

Author Dron was previously employed at the University of Brighton, UK. It is a traditional campus-based university, centred in the city of Brighton & Hove but spread across many campuses in different communities around the south coast of England. After sporadic and independent efforts throughout the 1990s to provide a range of virtual learning environments, including one designed by the author, in the early 2000s a Blackboard-based learning management system was established that integrated with student record systems and other tools, known collectively as “studentcentral.” The course orientation of studentcentral and the hierarchies of control that it embodied made it hard to adapt to learner-controlled methods of teaching, and made us painfully aware of the shortcomings of LMS systems. In response, Community@brighton was created by the university’s Learning Technologies Group in 2006. Based on the Elgg framework, it
was an attempt to provide a richer online social space to bind this distributed community, embed learning beyond coursework and the university, build richer social networks, and perhaps most significantly, enable methods of teaching and learning that were difficult or impossible in the existing studentcentral system. In particular, it was meant to increase opportunities for learner participation and control (Stanier, 2010).

The system was set up so that everyone at the university was automatically given an account, making it possible to claim that it was, at the time, the world’s largest Higher Education-based social network, with some 36,000 registered users, growing over the years to nearly 100,000 members at the time of writing. A total of 79% of all those who might log in did so at some point, though few persisted and fewer contributed, with only 4.5% active after two years of operation (T. Franklin & Van Harmelen, 2007).

At first, growth was impressive and the system was used in a wide variety of situations, including academic, social, and support settings. A particularly powerful illustration of its value was its key role in the prevention of a student suicide (T. Franklin & Van Harmelen, 2007). Many innovative uses were made of the system, including some popular alternate reality games to introduce prospective students to the university community (Piatt, 2009), and some innovative pedagogical uses (Dron & Anderson, 2009).

Author Dron was an avid promoter of the system. He was one of the most active contributors to the site, providing presentations and exemplars to colleagues and brought in invited luminaries from the world of online learning to promote the ways it might be used to enhance learning. This, combined with the facts that most viewed the system in a frame within the studentcentral system and students were forced to subscribe to course groups, led to an increasing perception of the site as simply an extension of the existing, institutionally controlled learning management system. Its use polarized, and as alternatives like MySpace, and later, Facebook became more popular, the social and support uses diminished.

A further blow was dealt when, in 2008, the system was upgraded to a new and very different version of the Elgg software which, though more modern and functional in design than the original and far more architecturally elegant, stripped away some of its most important friendly, useful, and usable features, and worse, resulted in the loss of some of the content and presentation work that many had invested in, as well as rendering all existing hard-coded links to parts of the site unusable. Among elements that were lost were the ability to import RSS feeds from other sites, and the means to receive comments from users who
weren’t logged in. This removed much of the beyond-the-university value of the site in one fell swoop. Other things that were lost included the Presentation Tool, a portfolio system created for the University of Brighton, which further reduced its value as a pedagogic device. Other small but important losses included the means to identify the access settings of particular posts, reducing faith and trust in the system, and a far less effective search tool, reducing the ability to find things across the site. Unwittingly, the new design also more clearly emphasized the institutional role of the system, with a large banner showing announcements and a feed widget displaying institutional announcements. It also began to lose its champions.

Though author Dron remained employed in a part-time capacity at the University of Brighton, he left its full-time employment in 2007 and his involvement, including his strong promotion of the system, diminished from then on. By the end of the first decade of 2010, a financial crisis was beginning to hit UK academia and resources that were at the best of times thin on the ground were increasingly channelled into other projects at the expense of the community@brighton site. An enthusiastic and skilled learning technologies group still managed to continue with a small amount of development but, on the whole, the site entered maintenance mode.

Community@brighton persists today, but its future is in jeopardy, and currently it is in visible decline. For the past couple of years its main roles have been to provide an advertising bulletin board for students sharing or seeking accommodation, institutional announcements, and a diminishing amount of course-related use, typically involving student blogging—usually only engaged in under duress for course grading. As we write this, of 98,766 users, only three are logged in and a widget displaying “hot topics” is completely devoid of content. The Wire, its microblog (the equivalent of Twitter on an Elgg system) has not been used for 27 days and most posts to it are classified advertisements or requests to meet similar people in the area. We sincerely hope that the system may yet be saved, but the signs are ominous.1

PROBLEMS WITH COMMUNITY@BRIGHTON

There are many complex factors behind the slow demise of community@brighton. We will identify some of the more salient issues.

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1 As this book goes to the press, we are sad to relate that community@brighton has just been decommissioned.
Interaction Design
Elgg has never been noted for its innate usability. The modularity that gives it great flexibility can, without very complex theming, also lead to a fragmented and often confusing user experience. This is, to some extent, inevitable in a rich toolset without a clear centre or focus, but it is also not helped by unintuitive metaphors, too much click-distance between related items, and inconsistent navigation and action tools. Use of terminology and tools like dashboards, profiles, and widgets confused people, even those familiar with the earlier version of the site, and without a compelling need to stay, drove them away.

Change Management Concerns
We have already noted some of the problems that occurred when moving from one version of Elgg (0.9) to another (1.0). The enormous discontinuity between the two versions came at a time when the site was still finding its feet, and for many, the loss of data and formatting reduced trust and commitment to the site. Had the new version been a compelling improvement things might have settled down quickly, but the loss of functionality that its users had come to depend on, including lecturers who had incorporated it into their courses and those who had simply provided a little content, as well as large changes in terminology and implementation, made the move painful and abrupt. The then-developers of Elgg were widely criticized for the lack of support for existing users, and there was much ill-feeling in the community, despite recognition of the underpinning design’s excellence and acknowledgement of the value of the new direction the software had taken.

The old version of Elgg was poorly engineered but very well evolved, while the new version was very well engineered but untried, untested, and lacking in features. None of the many plugins that had been developed for the old version worked in the new one, disenfranchising many in the buoyant and distributed open source developer community so much that some who had invested large amounts of time and effort in developing for the platform felt betrayed. It was like the shift between piston engines and jet engines in the aircraft industry: for nearly twenty years, piston engines outperformed jet engines in nearly every measurable way, until jet engines became sophisticated enough to surpass their predecessors (Arthur, 2009). The new Elgg had immense promise, but in its first iterations, failed to deliver and moreover failed to facilitate a smooth transition from old to new.
Mismatched Social Forms
Elgg supports groups and nets well, and offers a few set-oriented tools like the Wire (its Twitter-like microblog) and tagging. However, this flexibility is a double-edged sword. At any given moment, all of these social forms might be visible and only a click away. One might be in a group context and click a blog link, only to find oneself in a network context. Similarly, one might click a tag to find oneself in the context of a set. This fluidity is a strength in many ways, but also means that it is very hard to get a sense of place on an Elgg site. Furthermore, support for sets is not strong: many of the groups that were created on community@brighton were actually more set-like than group-like. For example, author Dron’s particular favourite, “Grumpy Old Gits”—a group for people to complain about modern life—required users to become members in order to post a complaint, even though what drew them together was only a shared interest in whining about life. For such a set-oriented interest, there is no need for the trappings of group membership—the hierarchies, rules, and norms simply got in the way, and when the group owner lost interest, it became unsustainable.

Another mismatch in forms arose from the fact that academia is a highly discontinuous and hierarchical group form. Students are members of course groups they are periodically engaged with, but the groups have sharply delineated start dates, end dates, and demarcation lines between one course and the next. Furthermore, students and staff are members of faculties and schools that are largely separate from one another, with loose networks connecting them. There are strong boundaries between year groups, with little overlap among networks within them. These and other discontinuities mean that the fluid engagement found in a public social network like LinkedIn, Facebook, or MySpace takes on a more clustered form in academia. Students and staff frequently move between different networks, groups, and sets, often in predictable ways. While Elgg’s fine-grained access controls are very useful for keeping these separate, it remains a single space viewed through different filters, and what is suitable for one context may not be suitable for all (Dron et al., 2011).

Lack of Ownership
Partially to compensate for its lack of centre, community@brighton’s role as an institutional organ was made too prominent: announcements, banners, and embedding with the institutional LMS fill the main real estate of the site, and conspire to detract from a sense of individual ownership. Because a major point of the site is to provide personal control, anything detracting from that reduces
the chances it will be enthusiastically used. A user-owned community site must embody a much different look and feel, and contain different content than the “official” website of an institution. Many users lost trust in the site after content, formatting, and functionality were taken away when Elgg was upgraded, further reducing their sense of control. When changes were made, it seemed that they were being inflicted from above, rather than emerging from the needs and interests of the site’s users.

**Competition and Overlap on Many Sides**

On the one hand, the institutional Blackboard LMS system has added tools such as wikis and blogs that, in limited group contexts, compete favourably with Elgg’s tools. If the purpose of an educational innovation is solely to share user-generated content within a closed group context, there are no great benefits from using a system that supports network- and set-oriented modes of engagement. On the other hand, the fact that the vast majority of students have Facebook or other social network accounts makes the need for social networking within the institution less compelling. This reality was compounded by the increased insularity introduced in the newer version of Elgg installed on the site. Another competitor in the form of Microsoft SharePoint, a staff-oriented tool that performs some similar social functions, has reduced the need for a tool that enhances sharing and social cohesion among staff.

**Lack of Champions**

Less than 5% of the site’s population contributed significant content and, among those, many were forced to do so because of course demands. This was a site with a very long tail. Over half of the 30,000 or so blog posts were created by author Dron, or more accurately, by a very buggy RSS tool provided with the earlier version of the site that imported the same posts repeatedly. Even so, Dron contributed some hundreds of unique posts over a period of several years. The loss of a single prolific poster, especially one with a strong evangelical mission to promote the site, was therefore a significant loss. While there were still a few champions after he left, there remained insufficient numbers of people with critical passion to sustain a sense of liveliness and topicality on the site.

**Lack of Diversity**

The flip side of the very long tail was that a small number of people appeared far more visible than the rest, thus establishing a culture and themes that would not
interest everyone. We encounter this issue again later in this chapter when we discuss a site developed to deliberately address the problems raised here. Author Dron over-promoted the site as an educational tool for use in courses, which led to a stronger focus on educational issues and a consequent lack of emphasis on social and support uses. A number of students realized that the site could be a useful bulletin board to advertise rooms wanted and for lease, as it provided a free channel that would be seen by sufficient others to make it successful. The Matthew Effect took hold, driving greater and greater concentration of such uses, eventually leading the development team to design a plugin to support this main use.

Meanwhile, site administrators spotted value to be gained from being able to quickly and easily disseminate information, deliberately promoting such news to the most visible top corner of the site’s front page. Although many groups were created for a wide range of interests, clubs, societies, religions, and hobbies, they were overwhelmed by the dominant uses. In order for a generalized social system catering to a set of people to thrive, there must be sufficient reasons for users to be there, otherwise they are like the areas in cities that Jane Jacobs (1961) identifies as dangerously monocultural, such as city centres where people go to work and then leave when the day is done, making them dead and dangerous at night or on weekends.

**Periodicity**

Students come and go with predictable regularity, typically for three or four years at a time. Champions who created groups and sustained and nurtured them while they were students of the university left, and with their departure the groups they created faded away. Even though many group members and new students might still have had an interest in their topics, the fact that their owners were no longer present meant that newcomers were faced with the choice of joining a moribund group, or trying to start a new, competing one with a similar purpose. This was particularly problematic when the “groups” were really sets—collections of people with shared interests. The mismatch between the group form imposed by Elgg and the social form of the set it was trying to cater to led to fragmentation and dissolution.

**Critical Mass**

A social networking system only has value if it has many users. This circumstance creates a “cold start” problem, where users do not participate in a new networking system until a significant number of people are present. While enforced enrolment
on the site provided a large population at the start, this served to highlight the limited amount of participation relative to the number of users. As user interest waned, it became self-reinforcing. It is not only important for there to be a lot of content, but on a social site, there must be visible and recent activity: the network effects of Metcalfe’s Law (1995) also works in reverse, with value decreasing proportionally to the square of the number of nodes in the network when nodes are removed, as MySpace found to its misfortune as its users left for Facebook in droves. The punctuated and time-limited nature of academic life, with ephemeral courses and fixed terms of engagement, meant that groups and networks experienced massive and catastrophic drops in membership every year, every semester, and sometimes in between, reinitializing the cold start problem once again. Only sets and groups, often devoid of active members and sometimes lacking owners, persisted. With ever-reduced resources being put in place to sustain and build these afresh, the site waned.

Me2u

At roughly the same time as community@brighton was being rolled out, author Anderson instigated another Elgg site at Athabasca University (AU) in Canada, named me2u. The reasons for installing the system were broadly similar to those informing community@brighton, though me2u’s ambitions were focused on a smaller community. While it did gain members from across AU over time, the site was mainly intended to encourage in-course, beyond-the-course, and open learning within a single academic centre, the Centre for Distance Education. At its peak, it had around 600 users. This smaller and more focused community developed into both a group-based support space and a means to support personal learning through portfolios and social networking within the community, including with its alumni. Its relatively small size meant that it was a mix of groups and tightly knit networks, and activity on the site remained fairly high because its use was required for a significant portion of its users at any one time as a coursework element. With a shared and cohesive vocabulary and purposes, the site appeared to be thriving, but it gained little from the benefits of network- and set-oriented modes of learning, and mostly kept a distinct disciplinary focus.

With far fewer resources than those available at the University of Brighton and without institutional backing, me2u remained a backwater research project but gained some avid users and supporters, driven particularly by Anderson’s enthusiastic endorsement of the system, bolstered by Dron on his arrival at AU.
in 2007. This was shortly before the new and ultimately improved version of Elgg that had caused so much disruption at the University of Brighton was released. Together, the authors of this book combined to build on me2u to achieve broader, more sweeping goals. The changes we planned were to encompass the whole university and beyond, to become a social learning space for formal and informal learning.

Athabasca Landing

The authors’ home institution, Athabasca University (AU), is unusual in many ways. It is an open university that accepts anyone regardless of qualifications, though a few senior and many graduate courses do require prerequisite knowledge or skills. It is almost entirely a distance institution, apart from a handful of courses, mainly at graduate level, with a small residential requirement, and another handful of courses that may be taken at partnered face-to-face colleges. One of its most distinctive features is that almost all of its undergraduate courses are self-paced: students can start a course in any month of the year and have six months to complete it, or up to twelve months with paid-for extensions. They can study and submit assignments and write exams at any time they wish. This provides great freedom of time, place, and pace, but traditionally does so at the cost of limited social interaction and virtually no opportunities for collaboration. Because the chances are very slim of two students with coincident timetables being at exactly the same point in the course at the same time, most interactions that occur in courses are limited to dialogue with tutors, or sporadic questions and answers on shared forums. This means that, though much high-quality learning goes on, the student experience can be lonely, disjointed, and lacking in some of the benefits of learning with others on a shared campus, where serendipitous encounters and the rich interactions of a community of scholars offers benefits beyond those of the formally taught classes. More than that, the focused nature of the dialogues that do occur ensures that it is very easy for gaps to emerge where one hard system does not perfectly interlock with another. Some students fill those gaps by asking questions of others and their tutors, but others see them as gulfs that are disincentives to continue. Dropout rates once a student has leapt the biggest gap of starting to submit work are quite low and compare very favourably with those of conventional universities, but before they ever submit a piece of work or start their course of study, these rates are very high.
The distance nature of the institution is not only limited to students. AU has traditionally followed a production model for most of its courses that evolved in the print and correspondence age of distance learning, with production teams including editors, learning designers, multimedia specialists, subject-matter experts, and a host of supporting roles developing well-engineered courses that are designed to be delivered more than taught. When courses are running, they are supported by teams of mostly part-time tutors and managed by a course coordinator who is often a member of permanent faculty. Faculty themselves are widely distributed geographically, most working from home and living in places spread across Canada, with concentrations in Edmonton and Calgary, and a very few at AU’s central headquarters, in the town of Athabasca, which is two hours’ drive from the nearest city. Not quite the middle of nowhere, but you can definitely see nowhere from there.

This means that the majority of interaction within the university is at a distance, and despite a plethora of communication technologies used to connect its staff, this makes it a victim of Moore’s theory of transactional distance (1993). There are many forms, processes, and procedures required to offset the relatively limited opportunities for dialogue when compared to a traditional institution. Manifold computer-based systems are used to disseminate information, and communicate to and between staff, but in the process, things fall between the gaps. However, communication tools can fill many of the gaps when used effectively. Email, Skype, telephone/teleconference, Adobe Connect, Moodle discussions, Zimbra groupware, and video conferencing facilities help to some extent, but each has limitations. Email is a powerful and effective technology than can be bent to almost any communication and information sharing task with sufficient effort, especially in conjunction with listserv technologies, but it takes a great deal of individual effort to manage effectively. It can be a scheduling system, a content sharing tool, an archive facility, a coursework submission tool, a voting tool, a personal networking tool, and a million other things, including its primary purpose as a communication tool, but each of these uses requires effort as well as organizational and interpretive skill on the part of sender and recipient. Email is also prone to error, inefficiency, and lack of reliability.

Moreover, email is a technology with the individual at its centre, a tool that almost completely blurs boundaries between multiple groups, networks, and sets. Moodle has facilities for discussion and sharing, but its hierarchical, role-based approach and the fact that it mirrors the organizational structures of traditional
courses and classrooms makes it inappropriate for more diverse uses. Furthermore, it provides limited personal control over disclosure and connection, especially in set and net social forms. Various forms of synchronous interaction are provided through Adobe Connect webmeeting software, Skype, and dedicated videoconfer- ence facilities between AU sites, with consequent limited cooperative freedoms of time, pace and, in some cases, place. Zimbra provides a wide range of tools such as scheduling, chat, file sharing, and collaboration, but it is highly oriented toward group forms of interaction, and because of AU’s unusually transient and self-directed student population, is not available for students.

None of the tools that were available provided the kind of variegated, connected social space where many people could co-reside, selectively share, and experience a sense of what others were interested in and doing outside the restricted social roles in which they encountered them. In short, there was very limited support for networks and sets. This was especially problematic for inter-actions with students, who were at the bottom of the control chain in almost every kind of engagement.

**Development of the Landing**

In late 2009, with institutional, provincial, and federal funds, the authors helped to create a social site, a kind of virtual campus or learning commons for Athabasca University that was christened Athabasca Landing. Athabasca Landing was named after the original name of the town (a nineteenth-century landing on the Athabasca river) in which Athabasca University is based, but the site has, from the start, been commonly referred to as “The Landing,” which is not only shorter but also reflects both its role as a place to land and gather, and a space between other spaces.

The Landing was designed from the start as a place to connect, share, and communicate, to reflect and inform the ideas that we have expounded in this book and in our earlier work, building upon our earlier experiences and benefiting from what we had learned about advantages and pitfalls in Me2U and community@brighton. We intended the Landing to be a place that filled the gaps, both in social engagement and in process, left between our well-engineered, hard, and purpose-driven tools. There were several principles that we formulated early on and that continue to inform its development:

- Ownership and control: the site should be by and for the people that use it, who should have complete control of what they create, who they engage
with, and who they share with, without significant hierarchies or top-down control. This made Elgg one of a small range of possible candidates as a platform for the site, as the vast majority of other systems embedded roles, access hierarchies, and top-down control in their design.

• Diversity: the site should be designed to cater to every need, avoiding an excessive emphasis on teaching activities.

• Sociability: social engagement and the ability to connect should be embedded everywhere throughout the site. Related to this was the notion that it should be a trustworthy and safe site, free from commercial motives, hidden agendas, advertising, or manipulation. Once again, Elgg presented itself as one of only a few alternatives that embedded social engagement everywhere, not just in confined spaces.

We discuss more fully some of the concerns, rationales, and discussion we had on these features in the following subsections.

Ownership and Control
We believe one of the reasons that community@brighton failed to reach its potential was that it was perceived as an extension of the institutional system. This perception was significantly reinforced by its most prominent use as a teaching tool: in effect, it became an extension of the classroom for many students, or was viewed as a communications tool for university administration despite its many social networking features and tools to create personal learning environments and bottom-up engagements. This perception was further reinforced by its tight integration with the university’s learning management system, a design that emphasized announcements rather than community-created content on its front page, and students’ forced membership in course-related groups. Furthermore, all students were automatically enrolled in the system when they registered with the university; they were not given a choice as to whether they were members or not. This immediately took away some of the benefits of deliberate group joining noted by Kittur, Pendleton, and Kraut (2009), and may have reduced motivation to participate as a result.

All of our design decisions about the Landing were based on the principle that its users are its owners. Before even starting to design the site, we enlisted a diverse group of over 50 AU staff and students to choose the tools and technologies to use, and to define its purpose. When the site was opened, we invited these people
to join a set of individuals to guide the development of the site: they formed a group we christened “Friends of the Landing.” This group has thrived—at the time of writing, it had 97 members: we will report on some of the learning that has occurred within it later in this chapter.

Elgg was not the only possible choice of infrastructure for this new site. When choosing a technology from 50 possible systems that provided the kind of tools we needed such as blogs, bookmarks, wikis, and file sharing, once we had weeded out commercial systems (we needed the flexibility of open source), and those that were hosted elsewhere (there was a need for privacy, in addition to flexibility and long-term ownership), the choice was narrowed down to two: Elgg and Mahara. We were very impressed with a number of content management and blogging systems, such as Drupal, Plone, Wordpress, Joomla, and LifeRay, and many involved in the project argued for extending the existing Moodle learning management system to meet our needs. However, all of these candidates embedded role-based or access hierarchies that meant end users would not be in complete control of their content, or if they were, ensuring they could exercise the rights we wished to give them without impinging on those of others would be an unsustainable management burden.

Mahara is a tool explicitly based on Elgg that specializes in the production of e-portfolios. While it is very good in this role, incorporating social networking and several tools such as blogs, file sharing, and wikis, and it was a highly polished product, its other features were decidedly lacking when compared to Elgg, and the effort required to add new features would be considerably greater. Both were extendible, but Elgg was vastly superior at that time: Mahara had a small handful of plugins compared to many hundreds available for Elgg. Elgg’s architecture had been completely reworked shortly before we were choosing systems in order to make it more of a social software construction kit than an extendible system, and so, as it was our intention to mould the system as closely as possible to the social forms we had identified and principles of design we had established, the final choice of the Elgg system was almost unanimous. We note, though, that the psychological lock-in to a system we were familiar with through development of Me2u may have influenced our decision. There were practical benefits to leveraging existing knowledge and skill sets, even though Elgg itself had undergone major revision.
Context Switching

Academic life for both students and faculty is a disjointed affair, with frequent and abrupt shifts between different social contexts: classes, courses, research areas, departments, terms, and so on, demarcate borders between areas of interest and sets, networks, and groups of people. Access permissions and the functionality of groups, networks, and collections allow users to both selectively reveal different things to different people and filter what they see according to various needs. We have built a number of tools that make switching between contexts more explicit and intentional by allowing people to place highly configurable widgets on different tabbed spaces for different purposes:

• Super-widgets: Widgets are small objects that can be placed on the screen to display (but usually not add to) different kinds of content—for instance, to view blog posts, files, recent activity, groups we belong to, and so on. Users of widgets can also access different social sites and services such as Twitter, newsfeeds from other sites, et cetera. Widgets can be placed in groups, on personal profiles, and on the user dashboard (a learning space used to organize and personalize an individual’s view of the site), and serve to alert users about fresh content, upcoming events, or important addresses. We have made extensive modifications to the widget functionality provided by Elgg so that users have far greater control over what they show, allowing filtering according to group, network, or set (through tags), date range, individually selected posts, and more. We added sorting and display options that make it easy to configure a group, profile, or dashboard according to individual needs and contexts.

• Tabbed profiles and dashboards: to support the super-widgets, we have extended the single-page views of individual and group profiles as well as dashboards to allow multiple panels for different contexts (see Figure 8.2 below). People can create tabs for particular courses, interests, and intentions, each filled with different widgets showing different content. This allows individuals to both switch between contexts—for example, to separate social from academic interests—and present different facets of themselves or their groups to others. Because each tab has the same sets of permissions applied to it as all other objects on the site, people can display one aspect of themselves to their friends, another to their teachers, and a third to the world at large. Similarly, research groups can have a tab that supports internal working processes and another to display their outputs to the world.
Figure 8.2 Profile page on the AU Landing, showing widgets, tabs, and the “Explore the Landing” menu.
A Soft Space Made of Hard Pieces

The Landing is highly componentized, both in architectural terms (Elgg has a very small core and gains almost all of its functionality from plugins) and in interaction design. For an end user, Elgg provides a set of tools that can be assembled, aggregated, reassembled, and integrated in an infinite number of ways. Creating a different use for the Landing is simply a question of assembling and configuring components to suit specific needs. The intention is to escape the prescriptiveness of a role-based hierarchical system such as an LMS, but to reduce the difficulties of building a system from the ground up. Widgets, tools such as blogs, wikis, bookmarks, and files, groups, tabbed groups, and individual profiles can be combined in many ways to meet diverse needs. The balance between ease of use and flexibility is difficult to achieve, and we are still some way from getting the balance right for everyone; indeed, this may be a quixotic search. One of the most frequently voiced complaints about the Landing is that it is complex, confusing, and hard to navigate. To deal with this, we are currently adapting a range of strategies, including story-sharing, social menu organization, and community-led design.

Sharing of Stories and Ideas

The help system of the Landing is constructed using the wiki tools available on the site, and we have attempted to encourage users to share their stories and suggestions within this context. However, few have done so, perhaps because the wiki is available in a Help group context, whereas it is more clearly and obviously a set-oriented activity: it would be unusual to feel a sense of membership for a help system unless one was explicitly recruited to it. Unwittingly, we have made use of the wrong social form to provide help within the system. However, a few Landing members have independently begun to share their stories and insights. A student, for instance, started “the Unofficial Landing Podcast” and interviewed other students, Landing founders, and even the AU president on topics of interest to AU members. A member of staff created a podcasting group in which he and a few others present ideas, links, and tutorials on podcasting though, once again, the group form acts as a barrier to entry, and means it remains primarily the domain of a single enthusiastic user. Another student started a videocast series that explored similar themes to the Unofficial Landing Podcast, but has since left the university. As we saw with the University of Brighton, individuals’ sporadic and time-limited involvement in the community causes problems of continuity and acts as a barrier to ongoing engagement.
Social Organization of Menus

Instead of the default tools-oriented menus natively provided by Elgg, we have reorganized the structure of the site in accordance with our model of sets, nets, and groups. The menus we provide are:

- You: profiles, dashboard, settings, options to view one’s own activity and content, and to post new content.
- Your network: options to see what people one is following are doing, as well as to discover and connect with new people.
- Groups: options to see one’s groups, the activity within them, and to join new groups.
- Explore the Landing: options to focus on specific tags and keywords relating to topics of interest (sets).

These explicit perspectives help to control the kind of interactions people have with others on the site. Those who wish only to engage in group contexts should be less distracted by network interactions, those who are interested in their connections with others should find them more easily, and those with specific interests should find it simple to discover and explore subjects and topics that matter to them. However, once users follow a link, they may soon find themselves in different contexts from those where they began, and this reality limits the extent to which the social organization of menus achieve the desired goals.

For example, when exploring the site-wide categories, as soon as an individual clicks on a specific post, they are immediately flung into whatever social context it was created in, often a group or a network, which requires a subtle transformation of perspective to understand the relationships between what they are viewing and what else it relates to. This remains an ongoing design problem.

Community-led Design

We are also engaged in a constant cycle of refinement that incorporates feedback and suggestions from the Friends of the Landing and others on the site. We have added an instant feedback link on every page using AJAX, so individuals can make comments without leaving the context in which their issue arose, or instigated discussions to which many have contributed. The ideas we have gathered as a result are beyond our technical capacity to deal with in a timely manner, but we are making progress all the same.

We also realize that even within closed communities, users may purposively or inadvertently post content that others find objectionable or unlawful. Thus, we have a link on the footer of each page where users can report content that they
feel violates norms or laws. Fortunately as administrators we have yet to see use of this link, but there has been controversy and discussion about a number of posts (we will discuss this later in the chapter).

The Friends of the Landing have monthly or bi-monthly meetings via web-meeting tools, and we have evolved a process of round-robin discussion where people share their experiences, concerns, and interests. This is not only a useful source of feedback for design purposes but also a means of sharing stories and ideas that spread through the community.

**Diversity**

Both Me2U and community@brighton became, for different reasons, monocultures. Me2U’s limited user base, largely drawn from a single, highly focused academic centre and just a few courses, was never evolved into a general purpose environment. The combination of academic focus, lack of ownership, and the exigencies of being a face-to-face university where, though campuses were distributed, most people who needed to meet in person did so, led to community@brighton eventually serving only three main purposes: teaching, announcements, and advertisements attempting to fill shared rooms in houses. While many other communities were created and some flourished for a little while, there were few reasons to visit the site outside of those specific needs, and so visits tended to be brief and task-focused.

As a starting point, we expended a fair amount of effort on migrating as much of the content and users from the older Me2U site as possible because it was being actively used in teaching and we could not sustain two social sites at once. This had a number of repercussions, not the least of which was an extremely strong emphasis on distance learning interests right from the start. As we observed in the last chapter, the impact of path dependencies and the Matthew Effect meant that we were starting in a weak position from which to encourage diversity. We adopted a number of mitigating strategies in an attempt to swing the balance away from this focus, actively recruiting our assorted group of Landing Friends to contribute from their diverse fields of interest, running events and giving talks to encourage people from across the university to engage, and deliberately shaping the environment—for example, we removed a tag cloud at the start that showed virtually nothing but education-related tags. Despite this positive discrimination and much work to encourage diversity over the past three years, the effects of this early bias continue to be felt. On the bright side, because AU is a distance university, many people who are not actually studying distance education do take
an interest in and benefit from the rather large amount of content and interaction on this subject.

**Sociability**

One of the reasons for choosing Elgg over alternatives such as the institutional Moodle site was that sociability was built into every part of the system. Unless people choose otherwise, the default behaviour for every object created—be it a file, a photo, a blog post, a wiki, a bookmark or a calendar event—is to enable comments and discussion to evolve around it. Whenever such commentary does occur, the individual who made it is shown in avatar form, with a hyperlink that allows people to follow them.

We deliberately changed the default Elgg vocabulary of “friends” to “followers,” partly because that is a more accurate description of the one-way relationships enabled by Elgg. I do not necessarily “follow you” if you follow me, unlike the reciprocal relationship of Facebook friends. We mainly did this because we did not wish to suggest a specific kind of relationship when one person connected with another. In many cases, we knew that people would be following the activity of teachers, for example, and using the relationship as a means of sharing work with them. We also recognized that many people would be sharing work with and following the work of colleagues, co-researchers, and others who may not accurately be described as “friends.” Elgg supports a feature known internally as “collections” that allows one to group those one is following into sets. One can create collections labelled with anything, such as “friends,” “co-workers,” “COMP602,” and so on. We improved this functionality to make it easy to create such sets at the time of following, in a manner almost identical to that which was later used by Google+ when it introduced Circles. Because of the subsequent popularity of Google+, we renamed “collections” as “circles” in order to make them easier to recognize.

We built a tool to enable comments on public posts from people who were not logged in, to support beyond-the-campus interactions, and extend the site beyond a closed, group-like community to broader sets and nets around the world. To make it easier to find people, we provided a tool that identifies followers of people one follows and fellow group members.

**The Social Shape of the Landing**

The Landing supports social networking functionality, but is not exclusively a social network like Facebook, LinkedIn, or Bebo. As Chris Anderson puts it, social networking is a feature, not a destination (2007). Many of the uses of the Landing
are group-oriented, but the fact that the technical form of a group has been employed does not always mean that the social form is appropriate: many groups are simply used to collect a set of resources around a single topic. For example, several students have created groups to amalgamate individual portfolios or research findings, while other groups have been created as a focus for areas of interest, such as the “Zombie Research Group” or “First World Problems”; a staff member has created a site to share photos of convocation events. Because of this, we have built a plugin explicitly intended to support sets that we call the Pinboard. Pinboards are technically similar to groups in the functions they provide but do not have any notion of explicit membership: essentially, they are containers for objects akin to boards on Pinterest or Learni.st. Unfortunately, though our Pinboard is a powerful plugin that has been taken up by many other Elgg-based sites around the world, it is far from easy to use and has not been as widely adopted within our own community as we had hoped.

Default Access
The capability of Elgg to provide fine-grained access control has worked well. However, thanks to the power of the default (Shah & Sandvig, 2005) permission setting has proven to be a powerful determinant of user choice. In the very early days, we hoped to attract outside readers and thus left the default permission to “public.” However, we soon found that many users had left this as their default, and a few were not pleased with the exposure on Google search engines that resulted. We thus changed to default to “logged in users” for general posts and to the members of a group, for content posted within groups, leaving it open for the user to set more or less restrictive permissions if desired.

A second useful feature of Elgg is the capacity to open or close membership to the site. We have chosen to allow login by any member of the university community (teachers, students, staff, and alumni) and have integrated the single sign-on used for other university systems. Although we have manually added a few guests working on research projects and so on, this has meant that potential contributors from outside the Athabasca network and set have been denied the opportunity to participate. We did, however, build in a moderated comment tool for outsiders to add comments to posts that are explicitly made public after appropriate moderation by the poster, to prevent spam comments. Thus we have described our Elgg installation as a “walled garden with windows.” Membership in the site is restricted, but any member can open a window through which their contributions can be viewed and commented on from outside.
Using Athabasca Landing

At the time of writing, the Landing has more than 5,000 users who have, between them, created over 20,000 resources, including around 8,000 blog posts, over 6,000 file uploads, and thousands of other objects like bookmarks, wikis, photos, polls and events, along with countless comments and annotations of other posts. There are nearly 400 groups. It is hard to analyze the precise purpose of all of these without interviewing the individuals who create and use them, and groups have a tendency to evade neat categorization: for example, groups that are purportedly related to a course may turn out to support a specific research student or project or, in a couple of cases, students may have set up their own versions of official course groups. Such is the bottom–up nature of the Landing. Bearing this in mind, we have attempted to classify the kinds of uses, using an iterative coding process. Relying on the descriptions provided and some informed guesswork, for instance, by identifying course names and numbers or recognizing specific organizational groups, we see the following breakdown:

- Research-related: 16%
- Personal: 5%
- AU business (e.g., committees and working groups): 15%
- Academic centre or faculty: 5%
- Non-formal learning (e.g., support groups for computing or hobbies): 9%
- Course-related (e.g., study groups, project groups): 21%
- Course administration (e.g., development or tutor groups): 2%
- Course (formal): 18%
- Social (e.g., local meetups): 2%
- Subject area: 2%
- Landing-related (groups supporting research, operations, etc. in the Landing): 4%
- Experimental (set up and forgotten): 1%

While there is still plenty of room for increased diversity and an understandably large emphasis on things that are related to teaching and learning, we have achieved some success in making the site sufficiently diverse so that there is more than one reason for someone to visit the site. Among the biggest of these is in formal course use. In the following section, we provide a few examples of the way that the Landing is used to support and enhance formal courses.
Information Technology (COMP 607)

Ethical, Legal, and Social Issues in Information Technology (COMP 607) is a graduate-level course provided to students in a distance-taught MSc in Information Systems at AU. The previous iteration of the course was based around a book, with weekly discussion forums centred on different chapters. It was a classic group-based course, with tutor-guided discussions enabled on Moodle, shared study of a single text, a set of short essays, marks given for participation, and a final examination, taken at home. Because study was paced, the group form was an appropriate approach but, as all students were working in the IT industry and had rich experiences to share, there were opportunities to draw more broadly from their own knowledge and gain from “teachback” (Pask, 1976) in a more networked manner. Furthermore, each iteration of the course had started with a blank slate, a newly replicated version of the original Moodle course, so none of the learning and knowledge building of previous iterations carried forward to new cohorts.

For the new revision of the course, a Moodle course was created with a broad and flexible course outline and a few selected readings, and the Landing was used as the platform where all course activities occurred. A group (defined in Elgg as a container for content and interaction with members) for the course was created. This automatically opened up the opportunity for a persistent record of student activity that would remain for the next cohorts to draw upon. The group would therefore naturally draw in more of the set, and open up opportunities for a network to develop, if previous group members remained in the group (membership after the course being voluntary).

The course was structured around a variety of social processes, a mix of debate formats such as fishbowls, team debates, Oxford-style debates, and small group discussions, and combinatorial cooperative strategies such as sharing bookmarks and contributing to an “encyclopedia.” Each week revolved around a topic that, after some introductory exercises in ethical and moral debate, explicitly focused on topics in the news. This emphasis on events within a few weeks of the course beginning ensures that students learn from previous cohorts but do not copy them. Basic arguments and viewpoints can and do repeat from one cohort to the next, but the content is always different and draws from a broader network.

Having run through two iterations, the course has been successful from the point of view of the experience and outcomes. Comments from students were
positive: “I was impressed by the level of intellectually stimulating debate. It certainly twisted my brain in a new direction and I am among a great group of folks!” and “I’ve enjoyed the discussions and the debates, and have learned a lot from people with different viewpoints,” and “it’s nice to see how many people have contributed to the discussions, almost everybody answering a different question.” However, the positive benefits were largely the result of pedagogical design that could have been achieved within a Moodle course using conventional group tools. The set and net benefits were thin on the ground, but some were seen. The second iteration of the course benefited notably from access to the work done by the previous cohort, especially when it came to the ongoing development of the “encyclopedia,” and there were two interjections from previous course members, which suggests value in ongoing networked connection with a course. Some benefits were seen from references to other posts by people from other faculties on the site, and one staff member from a different department contributed a couple of comments on open posts. However, the fact that the group was closed militated against deep involvement from across the set/net of the rest of the site, despite many of the students posting their work for all logged-in users and, in a couple of cases, public viewing.

All of this is, in retrospect, an inevitable consequence of following a traditional, closed-group process and the highly task-oriented instrumental approach used by most students accustomed to this mode of teaching. A major benefit of using the Landing, however, is that it is within the power of the teacher to implement change. In the next iteration of the course, it will no longer be a closed group. While assessment will, as ever, be limited to the paid-up members of the course, the group on the Landing will be open to anyone wishing to join. We hope that this will bring about a more interesting dynamic and encourage engagement from others beyond the course.

Planning and Management in Distance Education and Training (MDE605)
This semester-length course operates in paced mode and is compulsory for students in a distance Masters of Education program. The course has run for a number of years in Moodle, and the major assignments revolve around iterative development of extensive business and evaluation plans. The Moodle environment was used to store content and for the assignment dropbox, but all interaction took place in a closed Landing group limited to registered students in the course, though additional students were added each year. Students could choose to remain in the group and receive notifications of activities in subsequent years.
and add comments, or resign from the group upon completion. Thus, unlike typical LMS systems, students were able to review contributions, blogs, comments, wiki pages, and most importantly postings of assignments—draft iterations of business plans from former students. In addition, students were encouraged to post links to useful resources they found on the Net, and were required to post a summary blog in which they reflected on their contributions and experience in the Landing context. The course ran for three years, and thus a considerable “archive” accumulated. Students could choose to share their assignments with or without the marks and audio marking annotations inserted by the instructor (Terry Anderson). Interestingly, some chose to address deficiencies identified before posting assignments, while others chose to leave them.

Almost all the students expressed enthusiastic appreciation for the archive, especially the submitted and marked assignments. In a follow-up research study, students made comments, such as, “I had no idea how to approach this assignment until I saw what other students had done—it was great!” However, a minority were uncomfortable with this exposure to others’ work, and stated, “I came to learn this material myself, looking at the work of others would be cheating.” It strikes us that the latter attitude inhibits the great affordance of the Net: to search for and build upon the contributions of others, a process which has defined scientific publication and knowledge growth for centuries.

Also of interest was the decision made by the next teacher of MDE605, after Anderson moved to other teaching assignments, to discontinue using the Landing and revert to the standard Moodle presentation. This may illustrate the challenges of implementing change and the conservative nature of many academic institutions. Or perhaps it only illustrates the need for enthusiastic early adopters to propel exploratory use of new technologies.

THE LANDING IN A SELF-PACED COURSE

Athabasca University’s undergraduate courses are all based on individual study. Students enrol any month of the year, are assigned tutors, and then have six months to complete the course as it suits them. While catering well to many of the cooperative freedoms, it has historically been almost impossible to gain the benefits of group processes (collaborative or cooperative learning) in this self-paced context. Most people take courses in isolation, with occasional contact with tutors via email or telephone, and formal points of contact established for feedback on regular assignments.
Over the past decade or so, course designers and instructors have increasingly used learning management systems, particularly the centrally supported Moodle system, and many courses have incorporated group forums as an attempt to increase a sense of social presence and reduce the loneliness of the long distance learner. To some extent this has worked, inasmuch as forums have become places where students can ask questions about the course, and on the whole, get answers, sometimes from tutors and sometimes from other students. However, the group discussion forums are, as the name implies, designed for groups, whereas these independent learners are, in most respects a set, only bound together by the characteristic of taking the same course at the same time. Typically the forums are little used and often not effectively moderated by tutors, who are not paid for this “extra” work. Unlike a group, there is no shared collaborative purpose: everyone is doing his or her own thing at his or her own time, without dependencies on other people. Most of the time, beyond a name or occasional shared profile (optional, of course), the rest of the group remains anonymous, part of an undifferentiated crowd.

COMP 266
Introduction to Web Programming (COMP 266) is a course in HTML, JavaScript, and related technologies that had been running for a number of years as a textbook wraparound course. A study guide, available on a Moodle site, provided guidance on readings and exercises in the textbook. Moodle was used to provide a set of self-assessment multiple choice questions, a means of submitting the four assessment exercises for the course, and a threaded forum. The forum was almost exclusively used to get answers to specific questions and, as a result, over a period of years became a poorly organized but well-used repository of knowledge for students seeking information. Most students contributed nothing to the forum however, and for many, their only human interaction was with the tutor in the form of feedback on assignments. At the end of the course, students sat an exam at one of many exam centres around the world either run by AU or franchised out to other institutions. The course appealed to a few, but there were many complaints and many who registered but failed to complete the course.

In the course’s revision, author Dron applied many of the ideas and principles expounded in this book. While there were clearly few, if any, opportunities to make use of group-based learning, the natural set orientation of the self-paced course mode of delivery suggested a range of possible approaches. There were also opportunities to foster the formation of networks and, at least in principle, to use collectives to help harness the wisdom of the crowd.
Figure 8.3 COMP 266 group profile page on the Landing.
The course makes use of Moodle to provide fixed content, a place for students to submit work, and self-assessment exercises. Students are required to follow a guided and scaffolded process to build a single website that gains in sophistication as the course progresses, starting with a design unit the rest of the work is based upon, then working through HTML, CSS, JavaScript, library re-use, and AJAX integration. Students choose what the site is about, what functions it will have, and everything else about it. There are stop-points throughout where tutors give feedback but no grades, to ensure that students stay engaged and do not take on too much or too little to succeed. The only assessment for the course is a single portfolio: students are given a grade for each intended learning outcome rather than on work performed for particular units. Throughout, students are required to submit all the work they do via a closed group on the Landing (see Figure 8.3 below) in a learning diary that contains reflections, design artifacts, code, and so on, as well as links to their publicly visible sites. Students are permitted to set any permissions that they like for this work, as long as the tutor can access it as well. Many limit access to the group (the default), almost as many allow access to all logged-in users (members of the larger Athabasca community), and a few provide access to the whole world. A very limited number restrict access to only their tutor. Because grades are given for learning outcomes rather than specific pieces of work, students may submit any evidence they like of having met them, including annotations of links shared with others, help given to others, and general commentary in their learning diaries. This helps to align marks with incentives to participate in the set, without enforcing sociability on those who do not wish it. Those who do not want to engage or who wish to remain peripheral participants can be successful simply by creating a good website and set of reflections, but there are still dividends to be had from sharing.

From the point of view of the students, the course has been a huge success by allowing a full range of cooperative freedoms. However, this is again the result of pedagogical design, although unlike our previous examples, such a pedagogy would have been difficult or impossible without the ability to selectively share anything with anyone. Many students comment on the value of being able to see what others are doing and thinking, and benefit from the amplification effects of tutor and student feedback on work posted. Notably, students explicitly mention that they are inspired by what others have done, and are motivated to excel by the fact that others are not just looking at their work but displaying an active interest in it. There is a great deal of camaraderie in the course, with some students referring to their fellow students as a “cohort,” despite the fact that it is
nothing like one from an organizational perspective—by and large, this is a set, with cooperative sharing and mostly unsustained dialogue forming the bulk of social interaction.

Nevertheless, the overwhelming amount of communication has caused problems for many—we do not yet have powerful collective tools to provide the necessary filtering for this, though a collaborative filter is in testing as we write this book. This is exacerbated by a poor design choice to require students to share a single course blog. Although this does have benefits in making everything visible, which was the intention, there is simply too much to pay attention to. In other courses author Dron has created on the Landing, students either share their own personal blogs or make use of hierarchically structured wikis so that their work is still visible but separate from the rest. The wiki approach is more successful in a group context and still provides the benefits of visibility, but the personal blog approach has value in extending the course into the broader network. Beyond these issues, the interface is often seen as unintuitive, at least partly because of the ongoing confusion, despite our best efforts, of group, net, and set social forms, as we described in an earlier paper on a similar course run at the University of Brighton (Dron & Anderson, 2009).

INFORMAL LEARNING ON THE LANDING

While course-based uses of the Landing have shown the potential for social tools to expand the number of pedagogies we use and improve the motivation and engagement of learners, even beyond the course period itself, one of our biggest hopes for the site was that it would support learning outside of courses, to help build a richer learning community and foster forms of engagement that navigated the formal boundaries.

The Friends of the Landing

In the formal constitution of the Landing, we deliberately avoided the usual nomenclature of “steering committee” to describe the people who would help guide its development; opting instead for a “steering network” we christened it “Friends of the Landing.” We wanted it to be an informal and inclusive collection of people who engaged as based on interest and propinquity rather than as a result of the formal group edicts and processes that guide a typical closed-group committee. Anyone who uses the Landing can be a Friend of the Landing, and like most friends, the commitment does not require them to follow schedules,
meet quorum requirements, or adhere to established rules of conduct. Though we described it as a network and implemented it in an Elgg group, this is in fact more akin to a set, bound together by a shared interest in how the Landing develops. The Elgg group is simply a container where social objects of interest like discussions, links, minutes, wiki pages, and blog posts are shared. Almost all activity that goes on within the group is provided by people who set access rights to all logged-in users rather than to the group alone, demonstrating and reflecting its set-like nature. Similarly, though the vast majority of set members have chipped in from time to time, the fact that engagement is driven by current interest rather than commitment to a group, its members, and norms, strongly suggests that the set mode of engagement dominates this collection of people.

However, there are more complex patterns of social engagement overlaid on the group that make it a far from equal set. While some are unknown to others, many are networked with one another in different contexts, sharing the same groups or working together as staff members, friends, and fellow students. As in any formal education institution, there are power relationships in which AU staff are recognized as a different set from AU students, as well as more complex divisions within the staff that contribute both on academic and organizational lines: faculty, learning designers, administrators, and others exist in formal and informal juxtapositions within an institutional context. Notably, the core development team has a particularly strong role in an informal hierarchy, as the majority of decisions and suggestions made within the set are channelled through them, interpreted, and filtered, before being implemented on the site. Adding to those inequalities, people have to actually join the group to fully engage with all the tools: while most allow anyone with the rights to see them to comment, wikis and discussion forums are, at the time of writing, a peculiar subset of Elgg technologies that can be seen but not engaged with by people outside a group. We will be changing this in our new “set” developments, but unwanted mismatches between the set and various group and network social forms occur, since people deliberately have to become members because of the group’s technological form, and a group has owners.

There are synchronous meetings held monthly via an Adobe Connect web-meeting system to which all Friends of the Landing and, emphasizing the set-based nature of the engagement, anyone using the Landing are invited, but a lot of involvement takes place via the Elgg group itself. In addition to members of the core development team, the group contains faculty, support staff, administrators,
graduate and undergraduate students, interested bystanders, alumni, and executives of the university. The proportions are not determined by any formal constitution—those who are members are those who have self-selected to join. Sometimes, people contribute from beyond the group of members, as virtually all communications within the group are shared with all logged-in users of the site and a few are available to the whole world.

The other collection of people intimately involved with Landing development is the Landing Operations Group. Unlike the Friends, this is a true group in most senses of the word. It has a distinct mission and purpose, is closed to non-members, involves strong social ties, and is hierarchically organized: there are three co-leaders, the authors of this book and George Siemens. Most of its online activities take place in its closed Elgg group but it has regular weekly meetings in person/via teleconference, and also uses other tools such as the Bugzilla software management tool to manage interactions.

**BRIDGES AND ISTMUSES**

As well as the relatively formal uses of the Landing that we have reported on so far, threads of knowledge weave back and forth across the site, breaking out of course boundaries, sets, and formal groups and spreading across the network. To help foster this diversity, we have designed the site with a number of tools that make it likely for one to encounter the posts of others, with related content displayed in several places, a configurable activity river that shows posts from across the site and for specified groups and circles of people one follows, a random content widget that displays posts from across the site, and more. The Landing is a thriving community where comments are very common, including those that come from beyond the walled garden, and there is diverse activity and a strong sense of awareness of what others are doing. Although we have (yet) to implement real-time chat capabilities, several people have commented on the sense of reassurance and value gained from seeing that others are online, displayed via a counter on the site’s front page. There are typically 20–30 people logged in and identified as active (i.e., having loaded a page within the past two minutes) at any one time during the day. As I write this at 2 a.m. on a Sunday morning, even allowing for time zones (from 1 to 4 a.m. across most of Canada), I see that there are seven other people logged into the system. I have no idea who they are, but the collective thus plays a role in giving me a sense of relatedness with others.
The Landing is a work in progress, and there is a long way to go before we can trumpet its success. We outline some of the remaining issues in the following subsections.

**Punctuated and Time-limited Engagement**

Some of the problems that beset community@brighton remain on the Landing, and in some cases are magnified in the Athabasca University context. In particular, the fact that many students are visitors taking a single course who are not even enrolled in a program means that the punctuated nature of engagement that played a strong role in community@brighton’s dynamics is an even greater problem at AU. It is very hard for a student who is taking a single course for less than six months, with little social engagement in most cases, to feel any sense of ownership or belonging in a transient community. While we make it clear that, unlike access to most other university services, Landing accounts persist for the foreseeable future even when students have left, for transient students there are few compelling reasons to join or remain in the community at AU. Given the rarity of in-course communication between students apart from those created on and for the Landing, there are seldom networks of people to make it worthwhile to remain on the site; even when they form, close personal friendships or professional relationships are more likely to be maintained on a purpose-built and heavily populated site like Facebook or LinkedIn.

**Lack of Diversity**

For all our efforts to foster diversity, the strong Matthew Effect caused by an early influx of distance education students, combined with the fact that the most persistent users of the site are staff who have an inevitable interest in distance education, means that distance and online learning is by far the most prominent area of interest on the site. Because we have a strong policy of technological non-interference, all we can do to ameliorate this problem is evangelize about alternative uses, nurture these when they occur, and make explicit our celebration of diversity. But, though we are among the most prolific posters to the site, and we do run workshops and presentations, particularly to encourage staff members to participate, our views are just two among many.
Sets, not Groups

As we have already mentioned, the Friends of the Landing should be a set but is embedded in a group tool and is comprised of multiple overlapping groups and networks, all playing a significant role in its formation. We illustrate this with an example of a discussion that occurred around a problem users had commented on both in the group and across the site: that people sometimes post things others find distasteful, offensive, or boring. On the whole, the access control facilities on the site prevent such things from occurring, as people usually recognize there is a limited audience and deliberately post sensitive materials so that only those with an interest will see them. However, that is not always the case, and on some occasions, there are very good reasons to make controversial or sensitive posts public.

Yet because of the diverse sets of people on the site, some of whom are engaging due to coursework requirements, and all of who have diverse tastes and ethical or religious stances, this caused problems for some users. A couple users commented that they usually accessed the site from the workplace, where some content is forbidden or disapproved of. The discussion was started with a message outlining the problem and providing three solutions that Friends of the Landing had suggested, none ideal:

1. To provide the means to filter out/ignore specific individuals
2. To (optionally) censor specific words
3. To encourage people posting potentially sensitive content as “not safe for work”

For the purposes of this story and in the interests of preserving the right to privacy of the participants, we do not examine the discussion in detail, but will observe some of the outcomes that occurred to illustrate how the discussion was a valuable learning experience, how it failed to achieve the initial goals of its initiator, and how it resulted in further conversations that highlighted the complex interplay of group, set, and net modes of interaction on the Landing.

The discussion was a rich learning dialogue, in which many diverse points of view were brought to the table, with distinct camps in computing, social sciences, education, and support/administration staff. The discussion often revolved around the complex issue that the participants were not all equal, some being students of the staff involved, others being recognized researchers in their different fields, bringing expertise and vocabularies that required a great deal of unpacking and explanation. These explanations and clarifications provided benefits for many participants, several of whom commented on the enormous value they were getting.
from it as a transformative learning experience. Many difficulties were caused because some treated the Friends of the Landing group as a community, while others saw the whole Landing (the tribal set) as the community under discussion, and some were interacting with people they knew from other contexts. The fact that this was not, technically speaking, a typical hierarchical group, but more of a set, made it very difficult to come to conclusions.

Suggestions that problems should be resolved by establishing a cooperatively designed social contract, for instance, were difficult to bring to fruition because the discussants recognized that the Landing is not a single community but many, with different social forms including groups and sets and networks. Each of these cross-cutting cleavages has different, sometimes overlapping but often divergent needs and interests. By the time the discussion fizzled out, after branching into two further sub-discussions, over 180 messages had been exchanged, many of them lengthy and filled with references and links to further readings, and the discussion continued for some time in ensuing reflective blog posts. As we write this, no solution has been found that satisfies everyone, and it remains an ongoing wicked problem.

Ownership
We have noted the central importance of ownership and commitment, but it takes a huge leap of faith for an individual to commit posts and effort to build a network when the future of the site itself is unknown. One the many things that was done right at the University of Brighton was to make a commitment for the long haul (Stanier, 2010). It was recognized from the start that a large-scale social system needs time to grow, and growth cannot occur unless the people occupying the space feel it is more than an experimental campsite that may disappear at a moment’s notice.

To date, the Landing has been funded and supported as a research project, championed by this text’s two authors. However, the site’s creators have always intended for it to be an integral and (we hope) essential component of our distributed university’s infrastructure. Thus, we wish to migrate it to a place of permanence and continuity and to normalization within the university’s administration and budgeting cycle. As financial background, the project was initially funded by $150,000 (CAD) of research development funding and has since received about $80,000 a year from a variety of internal and external research funds. Almost all of this funding is used to support a full time PHP programmer with part-time support provided for systems administration from the university research centre.
We have had a number of discussions with our computer services (CS) department, and find that much of our development process parallels the ones used by the university to support its open source and proprietary administrative systems—including Moodle. However, we have evolved the Landing at much faster speed than a typical CS project, and do much of our development and testing following the Web 2.0 mantra: “release early and release often.” This results in a culture clash and occasional misunderstandings as we negotiate a future long-term home for the Landing. We are currently negotiating with the Library, which is attempting to reinvent itself, and we hope that the Landing will become an appropriate feature of this “library of the future.”

The Perils of “Release Early, Release Often”
Our preferred development process has been successful, inasmuch as the site has not failed, had its security breached, or been brought down (apart from once due to hardware issues we resolved using mirrored recovery systems), since it was first installed. However, some people have complained that the site changes too much. For those who are trying to use it as part of formal courses, instructions provided elsewhere go out of date very quickly: the Landing is not friendly to top-down group processes. For others, however, the Landing represents a constant learning challenge as new features and improvements provide new challenges. We do not have an easy solution to this problem. Our goal is to provide an ever richer, more valuable toolset, not a fixed single-purpose tool, but the price to be paid for increased functionality is increased complexity.

Achieving the right balance is difficult, especially as we are in the thrall of path dependencies whereby, if someone is using a tool, we cannot remove or change it so that data are lost. The Friends of the Landing have only approved the removal of one tool in the course of three years, a marketplace plugin that was hardly used, thanks to the distributed nature of the university.

CONCLUSION
In this chapter we have attempted to illustrate how the model and methods presented in earlier chapters play out in a complex, institutional setting. An overarching theme that emerges from this is the complex interplay between different components of the institutional machine and the social software embedded in it. Technologies, including institutional methods, procedures and techniques, pedagogies, tools, and information systems are assemblies, constituted in relation to