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This volume written by Dron and Anderson consists of ten chapters and is completed by a reference section and a useful index. The preface details the book's objectives, after briefly explaining the ambiguous nature of its title (the book is about how to teach crowds, but also about how crowds teach): to describe and discuss the theoretical foundations of the use of social software for learning and to explore ways that such software is used to support and enable learners to learn. In brief, the book is mainly about the use of social software for teaching and learning.

In the opening chapter, aptly entitled On the Nature and Value of Social Software for Learning, an overview of social software and its many advantages is given. When learners search on Google, visit a page on Wikipedia or a how-to site they are making acts of intentional learning. In addition, a huge amount of intentional and unintentional learning is facilitated every day through posts on Twitter, Facebook, YouTube, LinkedIn, Pinterest, etc. Smartphones are increasingly used more as information-finding devices than as simple communication tools. Large-scale courses and tutorials – MOOCs (massive open online courses) – are bringing together millions of learners. Citing several researchers the authors explain what social software is and how it has changed the way we view teaching and learning, before defining educational social software as "networked tools that support and encourage individuals to learn together while retaining individual control over their time, space, presence, activity, identity and relationship" (Anderson, 2005, p. 4).

Social software has become one of the most central means of enabling life-long learning: Google Search and Wikipedia are often the first port of call for many learners seeking knowledge. A vast number of social software systems are aggregations of different forms, offering one-to-one, one-to-many, many-to-many, many-to one, asynchronous, synchronous, direct and indirect interaction. A comprehensive table (pp. 11–15) gives an interesting overview of different types of social media by providing a description and examples, and also stating the types of interaction involved. Dron and Anderson give useful data regarding the number of users and applications of social software that exploded during the first decade of the twenty-first century. The site [Go2web20](#) provides links to over 3,000 unique Web 2.0 applications, most of which could also be classified as social software. These networked applications have user numbers that range in size from very small to large-country or even continent-sized populations. The successful mega social software sites, including Facebook, Twitter, Google+, YouTube, Tumblr, Pinterest, MySpace, SecondLife, Blogger, and Flickr, number their user accounts in the tens of millions, and tabulations of monthly unique visitors in the millions or even billions. Dron and Anderson cite Mejias (2005) who argues that social software serves two main purposes: to manage sets of social relationships, such that meaningful and functional social relationships can be built and effective communications can be maintained despite the numbers, distances, or time barriers that separate them, and to afford users of social software the opportunity to create and support more intimate and authentic relationships between friends, families and colleagues. In addition, Dron and

Anderson identify the following: from an educational perspective, social software can, for instance, enable users to provide helpful resources, help them move into the next zone of proximal development, solve problems, create more complex artifacts, present multiple perspectives and enrich connections, model different ways of thinking, explore ethical problems, learn to work with others and connect ideas.

Chapter Two offers a theoretical background on social learning theories, and it is also within this chapter that Dron and Anderson use their own three-generation model of distance learning pedagogies, which describes the shift from early behaviourist and cognitivist models (pedagogies of instruction) to social constructivism (pedagogies of construction) and today's emerging connectivist distance learning model (pedagogies of connection). Even though in this chapter the connectivist models are more tentatively described than the others, a larger section is given to them, since they are the current ones and also the ones that are mostly found in today's social learning environments. One important feature of this chapter is the inclusion of the underlying theories of the different models. In particular, the authors specify the following theories for connectivist models: heutagogy (related to self-determination), distributed cognition and activity theory.

In the third chapter, A Typology of Social Forms for Learning, starting from concepts such as groups, networks (or nets) and sets, the authors go on to talk about collectives, a notion they explain as emergent entities that result from social engagement. Social engagement underscores the role of collective intelligence which is very prominent in contemporary learning environments. The following chapters look at each of these notions (dyads, groups, networks, sets, collectives) in detail by providing valuable methods, tools, pedagogies and approaches.

Chapter Four highlights that the vast majority of research into social learning in formal education has focused on the group form because that has, until recently, been the only social option available to most face-to-face and distance institutional learners. In this chapter the authors analyze the strengths and weaknesses of groups, and discuss how educational groups typically form, perform and dissolve. Dron and Anderson demonstrate Tuckman and Jensen's five-stage model of group development — forming, storming, norming, performing, and adjourning in this chapter. Gilly Salmon's five-stage model of developing learning communities is also discussed. In addition, this chapter gives interesting comparative data on traditional and virtual groups. The latter, because they include less proximal clues, tend to need more explicit external direction (teaching presence), and more structured forms of organization. They further rely on more self-direction among learners. All these characteristics can be put in place through learning management systems, synchronous group tools and immersive online worlds. The advantages and disadvantages of group environments are discussed at length, before the authors move on to the next chapter.

In Chapter Five, the focus is on networked learning contexts, in which the teacher role is distributed among an indefinitely large number of teaching presences, from blogs to peers, from key network nodes to comments on discussion posts. An individual may be both teacher and learner simultaneously.

It is the sixth chapter that brings new ideas to the forefront. Concentrating on learning in a set (a simple aggregate of people and the artifacts they produce) as opposed to learning in a group or a network, the chapter is organized just like the previous two: it looks at place, content, pace, method, relationship, technology, medium, time, delegation and disclosure, to discuss the peculiarities of online sets. Of particular interest in this chapter is the discussion regarding tools for learning in sets. The authors distinguish between listservs, usenet news, open forums, mailing

lists, socially-augmented publications, tags, categories and tag clouds, social interest sites and content curation, shared media, locative systems, augmented reality, crowdsourcing and crowdfunding. The chapter concludes by outlining of some of the disadvantages and problems related to learning in sets.

Also innovative is Chapter Seven, entitled Learning in Collectives. A collective is defined as a different kind of entity, composed not of people but an amalgamation of their actions and products. Examples of collectives include rating systems like Slashdot Karma Points and categories, Facebook Likes, Google+ Plus-ones, and countless systems that provide Likert scale-style ratings, such as Amazon and YouTube; collaborative filters (for example, Amazon Recommends, Netflix, and MovieLens); data mining and analytic tools; swarm-based systems and ant colony optimization systems; social navigation systems and social network discovery engines; crowdsourcing tools and tools to assess reputation. There are, as with any system, some dangers involved. Dron and Anderson discuss the Matthew Effect (pp. 225-226), Filter Bubbles and Echo Chambers, sub-optimal algorithms, deliberate manipulation, loss of teacher and learner control, lack of pedagogical intent, and shifting contents.

Concrete examples of all the above are given in the Chapter Eight entitled Stories From the Field. This chapter is mainly concerned with the development and uses of Athabasca Landing, an Elgg-based system that Dron and Anderson have been working on for the past three years – it details the evolution of the software program while also pointing out the challenges of the previous versions, such as lack of ownership and lack of champions. Diversity, sociability and community-led design seem to be the main drivers of a successful Athabasca Landing.

Chapter Nine, Issues and Challenges in Educational Uses of Social Software, presents a series of overarching issues of privacy, disclosure and trust, cross-cultural dissonances, technological problems and those related to the digital divide, unpredictable systemic effects, and other risks. This chapter provides possible solutions and ways of mitigating the risks. One of the important proposals of this chapter is related to potential niches. Indeed, according to Dron and Anderson, the following will be important if we are to make effective use of networks, sets and collectives within an institutional setting for the greatest impact by supporting needs and interests not already catered to by a well-evolved and entrenched set of tools: Inter-/cross-disciplinary learning (e.g., support for using common research tools, cross-course projects, etc.); learner-driven (as opposed to syllabus-driven) pedagogies; beyond-the-campus learning (incorporating others beyond the institution, whether formally or informally); beyond-the-course learning, supporting disciplinary activity and interest across cohorts; self-guided research; self-organizing groups (e.g., study groups); just-in-time learning; enduring committees, clubs, and student organizations; and peer support (e.g., for learning to use research tools, computers, etc.) (p. 277).

The final chapter looks at the future and is thus entitled The Shape of Things and of Things to Come. Dron and Anderson predict that teaching and learning will become more situated, just-in-time, personalized, disaggregated and re-aggregated, distributed, disciplinarily agnostic and research-oriented. They also note that there are many technologies on the horizon whose growth is influenced by increased communication and connectivity and whose repercussions are difficult to imagine.

In conclusion, it is safe to say that this book shows how complex learning and teaching is, since it combines technologies, pedagogies, organizational structures, social bonds and individual needs, with many interdependencies and systemic consequences. Dron and Anderson demonstrate how changing one part of a learning system needs to go hand in hand with the conscious knowledge that each part in a system affects, and is affected by, all the other parts. We should not forget,

however, that communication and learning (whether face-to-face or at a distance) are very complicated—influenced by a host of variables, including context, skill, attitudes and the form of mediation used to convey that communication. Dron and Anderson take a successful shot at explaining some of the variables involved in these complicated processes. All the chapters give sound overviews of existing theories, practices and experiences, but the sixth and seventh chapters in particular offer readers new insights. According to Dron and Anderson:

> We have solutions to some of the risks of a networked learning environment, but many risks and uncertainties still remain. The greatest risks all come back to difficulties in understanding the nature of social engagement in social media. Excessive content is often a direct consequence of superimposing a network or set form on that of the group, without adjusting the processes and methods used by the group. Privacy concerns often occur as a result of misplaced assumptions in a closed group, when in fact the social environment is net-like, or worse, set-like. Alienation and separation occur when people mistake Net-enabled interaction for relationships in meat-space (i.e., the non-cyberspace "real world"). Shifting contexts become hidden in simplistic, one-dimensional models of identity provided by many networked social environments. Collectives, used uncritically, are as likely to lead to stupid mobs as they are to wise crowds, perhaps more so, and the dangers of filter bubbles creating echo chambers where vision becomes narrow are great. (p. 298)

Despite the fact that the book is very biased towards the American/Western world (there is very little information about Africa or Asia (China? WeChat, QQ), the authors give their readers good overview tables summarizing several pages of continuous text and informative insights on historical evolutions and recent trends in the field of social media, teaching and learning. Even though it is published in book form, it should be pointed out that the book also exists in e-pub format, and is not only available for purchase, but also as a standard PDF that can be downloaded for free at http://www.aupress.ca. This is in line with the vision and mission of Athabasca University Press to be a fully open access publisher that wants to disseminate knowledge as widely as possible.

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