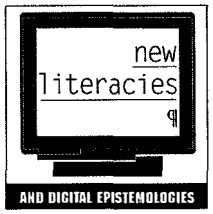
DIY MEDIA



Colin Lankshear, Michele Knobel,
and Michael Peters
General Editors

Vol. 44

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DIY MEDIA

CREATING, SHARING AND LEARNING WITH NEW TECHNOLOGIES

EDITED BY
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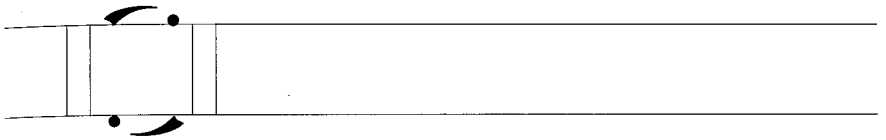
Library of Congress Cataloging-in-Publication Data

DIY media: creating, sharing and learning with new technologies /
edited by Michele Knobel, Colin Lankshear.
p. cm. — (New literacies and digital epistemologies; v. 44)
Includes bibliographical references and index.
1. Educational technology. 2. Media literacy.
I. Knobel, Michele. II. Lankshear, Colin. III. Title: Do it yourself media.
LB1028.3.D59 371.33—dc22 2009025888
ISBN 978-1-4331-0634-7 (hardcover)
ISBN 978-1-4331-0635-4 (paperback)
ISSN 1523-9543

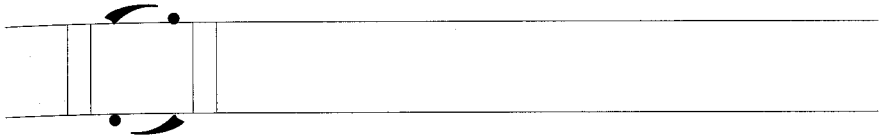
Bibliographic information published by **Die Deutsche Nationalbibliothek.**
Die Deutsche Nationalbibliothek lists this publication in the "Deutsche
Nationalbibliografie"; detailed bibliographic data is available
on the Internet at http://dnb.d-nb.de/.

The paper in this book meets the guidelines for permanence and durability
of the Committee on Production Guidelines for Book Longevity
of the Council of Library Resources.

Printed in the United States of America



To our dear friend Harvey Sheppard of Bottle Cove, Newfoundland.



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Acknowledgments

The editors and authors would like to thank the following for giving permission to use their images within the chapters of this book: Yahoo! for permission to use the screen shots from Flickr appearing in Figures 4.1, 4.2, 4.3, 4.4, 5.1, and 5.5; Guy Merchant for permission to use his photographs in Chapter 4; John Potter for permission to use his photographs in Chapter 5; Heather Armstrong for the screenshot from her blog, ***dooce.com***, appearing in Figure 5.2; Go Squared Ltd. (http://www.gosquared.com) for permission to use the icon set titled "40 Image Editing Icons" (currently available at http://www.gosquared.com/liquidicity/archives/384) and shown in Figure 5.3, and in particular, James Gill of Go Squared Ltd., who created the icons appearing in Figure 5.3; Alice Potter for all images appearing in Figures 5.4a, 5.4b, 5.4c, and 5.4d; Alexandro Nuñez for his original artwork for a Machinima storyboard appearing in Figure 6.1; Shinywhitebox.com for the screenshot from iShowU appearing in Figure 6.2; Anim8 Stop Motion creator, Michael Mallon, for his time and responses to interview questions; Keegan and Greg Twigg (twiggarts on YouTube) for the image appearing Figure 7.1; and Martin Waller for his detailed comments about using stop motion in

his Year 2 classroom, and for permission to use the image appearing in Figure 7.6 in this volume.

The editors particularly thank the authors for their contributions to this book. We know they all lead busy and demanding lives, and are deeply appreciative of the time, effort and expert insights they have given to this project. We have learned a great deal from each of them.

Caitlin Curran is due special thanks for her administrative, behind-the-scenes work on this manuscript, including help with formatting, proofreading, obtaining permissions, among other, often tedious, tasks. Requests for assistance were always met with a smiling "Sure!" and tasks were meticulously done and completed well ahead of schedule. We are very grateful for her contributions to this book.

The editors' warm thanks are also due to Harvey Sheppard and Vera Joyce of Lark Harbour, Newfoundland, for offering "whenever" access to their computer and the internet during the summer of 2009 while we were writing the introduction to this book (ostensibly "on vacation" and "away" from "all that stuff"). They also contributed directly to our thinking about DIY culture and ethos in everyday people's lives.

We thank the various universities, colleges and schools employing the contributing authors for supporting their research and publishing activity. In our own case as editors, we thank the following universities for their ongoing support of our work: Montclair State University, James Cook University, Mount Saint Vincent University, and McGill University.

We also thank everyone at Peter Lang Publishing for making this such an easy project to administer. Quick answers to our queries, the right forms to fill in at the right time, and important advice regarding formatting and figures are just some of the valued input we received. In particular, we'd like to thank Bernadette Shade and Chris Myers for their usual patience, goodwill and good humor throughout this writing project.

Chapter 1

DIY Media: A contextual background and some contemporary themes

COLIN LANKSHEAR AND MICHELE KNOBEL

Introduction

This book aims to introduce do-it-yourself—DIY—media to educators and caregivers who are aware that young people are doing a lot of "digital media" work on a day-by-day basis and who would like to know more about what this work involves. Its audience includes teacher educators, in-service teachers and teachers in training, educators involved in professional development and after-school programs, librarians, parents, and other caregivers who want a better understanding than they currently have of what many young people are doing with digital media. The following chapters explore what is involved in creating media—and learning how to create media—from the standpoint of participating in a range of DIY media practices, such as podcasting, music remixing, creating flash animations, making machinima movies, and so on.

The book takes a *practice* approach to its subject matter. Each chapter addresses its particular form of media engagement in ways that illuminate it as a sociocultural *practice*. Practices are socially recognized ways of using tools and knowledge to do things (Scribner & Cole, 1981; see also, Gee, 2004, 2007; Hull & Schultz, 2001; Lankshear & Knobel, 2006). Podcasting, for example, involves using particular kinds of tools, techniques and technologies to achieve the goals and purposes that podcasters aim to achieve, and to use them in the ways that people known as podcasters recognize as appropriate to

their endeavor in terms of their goals and values. We think that understanding what many young people are doing with digital media is a matter of understanding what it is they are intent on ***doing and being*** when they engage with media as DIY creators/producers. This is a matter of knowing something about their goals and aims and purposes; their tools and how they use them; the knowledge they draw on and seek to obtain in crafting their production to a personally satisfying level of expertise; the values and standards they recognize as relevant to good practice.

The audience we envisage for this book is one that seeks a better understanding of young people's DIY engagement with media for ***educational*** reasons—in a broad sense of "educational." They are not just curious about what kids are doing. Rather, they want to be able to make meaningful and respectful connections to these practices; connections that will contribute to learning in ways that will enhance young people's prospects of living well in the present and the future. In some cases, making these connections might simply involve coming to appreciate the complex skills and understandings inherent in these pursuits, instead of worrying about DIY media tinkering and experimentation as nothing more than a waste of time or as eating into students' attention to homework. In other cases, it might be a matter of seeing how connections can be made between classroom curricular requirements and what children and young people are doing-for-themselves with digital media. This is ***not*** to suggest that teachers should suddenly turn around and import each and every DIY media practice directly into the classroom. The point is, rather, to understand how key learning principles and systems of appreciation (Gee, 2007) tied up in these practices can be used to inform sound teaching practices (e.g., how the principles of effective video editing developed from creating machinima can be translated into editing written narratives or play scripts).

Developing this latter kind of understanding is not a matter of just reading about DIY media practices in the abstract. It requires, more than anything, some kind of embodied, hands-on engagement in the practice. And this, in turn, extends well beyond simply coming to grips with the technical aspects of a given DIY media practice (e.g., how to move the playhead to where you want to clip a movie, how to add searchable tags to your photos within Flickr.com), although this dimension is important. It also necessarily includes a commitment to obtaining a sense of "insider" perspectives on the practice by spending time participating in, and even contributing to, relevant affinity spaces. Affinity spaces are "specially designed spaces (physical and virtual) constructed to resource people tied together . . . by a shared interest or endeavor" (Gee, 2004, p. 73). These spaces can extend across online archives or artifact hosting websites (with provision made for leaving review comments, etc.), discussion boards, face-to-face events, paper-based and online

guides, and the like—all of which support people in accessing and sharing knowledge "that is distributed and dispersed across many different people, places, Internet sites and modalities" (ibid.). In the case of creating a stop motion animation, for example, this might include spending quite some time browsing the videos archived at StopMotionAnimation.com or on YouTube.com and reading review comments in order to generate a sense of what constitutes a "good" stop motion animation (e.g., photo display timing is set to ensure a sense of fluid motion, lighting remains constant from photo to photo within a single scene). Watching a good number of videos hosted at either site soon shows which themes, topics and storylines are done to death in the world of stop motion animation, and which are fresh and innovative. Reading interviews with stop motion animators about what got them started and what keeps them involved at sites like Anim8StopMotion.com also affords useful insights into trends within DIY stop motion animation creation as well as helps to identify what are considered to be landmark videos that contribute to setting the benchmarks for judging innovative animations (see Chapter 7, this volume). A focus on ***practice*** therefore includes the technical dimensions of the practice, as well as the insider perspectives on what it means to create something well (or well enough to be personally satisfying or to meet a given purpose).

Accordingly, each chapter in this book begins with a section that discusses the particular media practice in focus (e.g., podcasting, music remix, photosharing) from the standpoint of insiders to that practice. The authors consider some of the cultural knowledge and cultural ways that members of that practice—or sharers of that affinity (Gee, 2004)—recognize, contribute to, honor and strive to maintain and develop. The authors present their perspectives in ways that will provide newcomers or "strangers" to the practice with a sense of who the people are who participate in the practice, what is in it for them, and how they interact with others within this practice. At the same time, the authors' points of view engage those of other people participating in the practice whose views may vary on some points (e.g., around future trends and directions), thereby opening up possibilities for further reflection, debate and growth.

The middle section of each chapter is a "how to get started" statement, designed for people who want so far as possible to "learn by doing" (and "create while learning") in the area of DIY media, but who would also like a ready reference to augment the support they can get face-to-face from expert others, or that they can access online by running Google searches, trawling sets of relevant "frequently asked questions" (FAQs) and answers, accessing discussion forums, and so on. We firmly believe that in order for "outsiders" or newcomers to begin to move towards becoming "insiders," they need to begin by ***participating*** somewhere. This is much the same as it is, say, for ethnographers who want to study a culture different from their own. Ethno-

graphers need to begin participating in events—typically in everyday events that have discernible steps such as food preparation or religious ceremonies—before they can start understanding these events as an insider might. Observation alone is insufficient for understanding any culture. Working at "getting on the inside" of a practice has two dimensions—as we've already alluded to above: the hands-on dimension, and the culture/affinity dimension. The aim of the middle section in each chapter, therefore, is to give newcomers support in "having a go" at a range of DIY media practices. Each chapter includes within this section reference to key sites within the practice that help mobilize affinities (e.g., Machinima.com for machinima makers, AnimeMusicVideos.org for AMV remixers), along with other recommended sites for obtaining technical help and other resources. Many chapters also include references to online how-to guides or structured walkthroughs that act as direct props for newcomers to use to support getting stuck in and "mucking around" with producing a media artifact of one kind or another.

The final part of each chapter is intended to contribute to the evaluative, reflective, critical dimension of social practices from an educational standpoint. It poses "so what?" questions about media practices in relation to educational purposes. This involves negotiating a tricky tension between intrinsic and more instrumental purposes. There is a world of difference, for example, between the intrinsically motivated pursuits and efforts of ***bona fide*** fans of media phenomena (Jenkins, 1992, 2006a, 2006b)—who engage in the practice because it is integral to their cultural interests, peer relationships and identities—and the pressures felt by many educators and teachers in training that they should "get up to speed" on 21st century media and skills; that they should pursue some "insider-like" proficiencies and appreciations of new media practices in order to make better teaching and learning connections with digital age learners and with contemporary shifts in theories and practices of learning (Buckingham et al., 2004; Ito et al., 2009; Jenkins et al., 2006). We are sensitive to this tension because we feel it ourselves on a day-to-day basis. To the extent that we ourselves can make the time and create the space, we revel in "mucking around," "tinkering," and creating media artifacts for the sheer intrinsic pleasure of doing it and the sense of fulfillment it generates when something "comes off" at a level or standard we are content with (all too rarely, of course!). For us, this is the heart and soul of DIY media—people doing it because they can't ***not*** do it. At the same time, we are acutely aware of the extent to which we have only "got into this stuff" because we have felt we "had to" in order to do the best job we can as educators. As editors, this book is very much grounded in our own experiences of contradictions: contradictions that the chapter authors have been recruited to explore and, we suspect, that they experience to varying degrees themselves on a continuing basis.

Our brief to the chapter authors was to write for a wide range of users, including relative newbies through to those who are very much at home using their computers. This caveat reflects our own teaching experiences; in graduate courses we have taught teachers who needed to ask their neighbor over to help them find the "on" button on their new laptop computer, teachers who only recently opened their first email account, and teachers who had long been using blogs and digital movie editing processes in their classrooms. Computer-savvy teachers are likely to find the historical background in each chapter provides useful contextualizing information; newbies are likely to find the step-by-step guides and suggestions for finding additional support and trouble-shooting advice online most helpful to begin with. All readers are likely to find something of interest in the suggestions for teaching each author provides. This collection is designed to be dipped into on a just-in-time-and-place basis, and the chapters can be read in no particular order, as can the sections within each chapter. When all is said and done, however, it is only an introduction to each of the eight DIY media practices showcased across the chapters. And it is certainly not an exhaustive accounting of all the possible DIY media practices currently engaged in around the world. In sum, this book offers a series of how-to guides, but it is no substitute for immersing oneself in the social practices associated with creating a digital media artifact well and ***doing it yourself***. Hopefully, however, it may help to encourage at least some readers to throw themselves into "mucking around" with one or more of the cultural practices and associated digital media described, according to personal preferences and interests.

DIY and DIY media

As terminology in common usage, "DIY" or "do-it-yourself" is usually traced to the early mid-1950s U.S. scene (Merriam-Webster.com cites 1952; dictionary.com cites 1950–1955). Early uses made particular reference to people (by implication, mainly males) undertaking maintenance, repair or modification work on major investment items like homes and vehicles, without (necessarily) having the specialized training or expertise associated with that work. In such cases, individuals believed they could do the work in question sufficiently well to be able to bypass the paid (often costly) services of specialist personnel (such as "professionals" or tradesmen). Benefits from doing this include saving money, convenient completion times, personal satisfaction, having it done the way one wants, and so on. The rise of DIY coincided historically with the growth of the suburbs and suburban lifestyles in the U.S. and elsewhere throughout the western world. It moved established forms of domestic activity and self-reliance—such as farmers fabricating their own implements and/or repairing commercially produced implements, and

women knitting or sewing garments for the family—onto new terrain, and onto a new scale. Furthermore, it also allowed the domestic producers of long established "home-made" artifacts to aspire to a different quality of production. Whereas "home-made" traditionally implied products that were "folksy" or otherwise visibly not "commercially produced," DIY-ers could now aspire to a more professional look and feel to their production.

The "tasks, tools and knowledge" framework derived from the concept of social practice provides a useful way of understanding this phenomenon. The new "home-made" of post-1950s DIY emerged as more specialized ***tools*** and ***knowledge*** became more readily accessible (i.e., available to "non-specialist" people at affordable prices), allowing ordinary people to entertain the idea of pursuing what had hitherto been specialized ***tasks***. In the area of home improvement, for example, this involved the emergence of small scale but sophisticated power tools, along with locally available night courses, hobby classes, magazines and other DIY publications, kitsets and their included step-by-step guides. Much the same applied in areas like sewing, knitting, and cooking/catering or home entertaining, as new knowledge resources akin to those available for home improvement emerged alongside increased access to sophisticated programmable sewing and knitting machines, overlockers, and professional grade ovens and food mixers, and the like.

It has subsequently become common to talk about a DIY ethic, and to extend talk of DIY far beyond its most common early referents.

> The DIY ethic . . . refers to the ethic of being self-reliant by completing tasks oneself as opposed to having others who are likely more experienced complete them. The term can indicate "doing" anything from home improvements and repairs to health care, from publication to electronics (Wikipedia, 2009a, no page).

At the level of an "ethic," DIY has been linked to a range of antecedents and values systems. These include a late 19th century Arts and Crafts movement associated with figures like William Morris, which sought to keep traditional arts and crafts alive in the face of displacement by escalating industrial/mass production processes and/or to reject a growing industrial aesthetic (Wikipedia, 2009b).

More recently, DIY has been associated with a range of 1960s-1970s philosophies and countercultural trends, including anti-consumerist, anti-corporatist, environmental, self-reliance, self-actualization, New Age, and subsistence values and practices (see, for example, Lavine & Heimerl, 2008; Spencer, 2005; Wikipedia, 2009b). For example, the work of Ivan Illich (1971, 1973a, 1973b, etc.) provided an especially sophisticated and forceful account of how professionalized institutions, from the church to the school,

have disabled people, forcing them to become dependent on those professionals who alone are sanctioned or authorized to provide various services. The logic of enforced consumption of professional services through manipulative institutions (Illich, 1973a) conditions people to confuse the process of realizing values with the process of consuming commodities. What people can do perfectly well for themselves has been rendered illegitimate, and, to the extent that legitimate services come at a price, what is readily available in principle has become economically scarce in practice. The result is a profound and disabling "disempowerment," which includes being robbed of the opportunity to discover what one might in fact be able to do for oneself and, in many cases, do better and more to one's personal tastes and beliefs than is "delivered" by a professionalized institution or bureaucracy. Illich went so far as to describe school—"the age-specific, teacher-related process of full time attendance at an obligatory curriculum" (1973a, p. 32)—as "the reproductive organ of the consumer society," and was a key informant (along with people like John Holt and Everett Reimer) for the emergent homeschooling and unschooling movements of the 1970s.

Many commentators (e.g., Spencer, 2005; Tiggs, 2006; Wikipedia, 2009b) highlight the influence of 1970s punk on the evolving DIY ethic and on the subsequent direction of DIY media in particular. They talk of a substantial DIY subculture grounded in anti-corporate and anti-consumerist values having impacted DIY music and (online) self-publishing and encouraged personal styles of self-presentation, self-expression, and identity work.

With respect to self-publishing, punk amplified the orientation and scale of zines, or "cut and paste publishing" (Knobel & Lankshear, 2002). These short-run magazines—"zines" for short—were originally typed texts that were cut and pasted by hand into booklet form and copied. Some writers date zines as an identifiable cultural form back to the 1940s (Chu, 1997; Duncombe, 1997, 1999; Williamson, 1994). Personal zines—perzines—are more recent, achieving "critical mass" in the mid-1980s. These zines grew out of the 1970s punk rock scene as fans put together "fanzines" about their favorite bands, focusing on biographical details, appearance dates and venues, album reviews, and the like. According to a Wikipedia (2009b) entry, the "burgeoning zine movement took up coverage of and promotion of the underground punk scenes, and significantly altered the way fans interacted with musicians" (no page). These zines were distributed during concerts or via networks of friends and fans. They soon evolved into more personalized locations of expression and their topics and themes ranged far beyond the punk rock scene. They nonetheless retained their roots in a DIY ethic, becoming a key "gateway to DIY culture" and generating "tutorial zines showing others how to make their own shirts, posters, magazines, books, food, etc." (Wikipedia, 2009b). Increasingly, zines are published on the internet (sometimes referred to as "ezines"). Conventional paper zine pro-

duction now also often involves computers in the production process, although today's zinesters typically retain the DIY ethos and the look and feel of original zines; for example, using computers to key and markup the text, then cutting and pasting texts and images onto each page after they have been printed, and then scanning or copying these pages as they are.

Of course, punk subculture nurtured the development of DIY music, whereby legions of bands generated audiences, created fan bases, recorded their music and produced merchandise outside the ambit of corporate labels and the kinds of constraints imposed by "commercial considerations." This created "opportunities for smaller bands to get wider recognition and gain cult status through repetitive low-cost DIY touring" (Wikipedia, 2009b). Above all, perhaps, so far as subsequent DIY music media is concerned

> punk taught people that you don't have to be virtuoso to . . . make music. Similarly, the computer-based music phenomenon has taught people they don't need instruments or other people to make music. Remix, as a particular form of that [DIY] principle, teaches people that anybody can comment on or interpret already existing music. Finally, as with punk, the expectation is not that you are remixing to secure immortality. The idea is that doing it yourself (DIY) is a worthwhile activity in and of itself (Jacobson, p. 32, this volume).

Other important DIY media practices and influences ran alongside punk in the 1970s (and earlier), like dance music and fan video remixing, but were not explicitly countercultural or ideological in the sense that punk was. Dance music remix dates to Jamaican dance hall culture in the late 1960s and the wish to customize existing music to suit the tastes and needs of different kinds of dance audiences. Drawing on the potentials of particular tools and technologies (e.g., turntables, magnetic tape, audio tape recording) DJs and individuals with access to recording equipment began using homespun techniques to remix songs. DJs used twin turntables so that they could play different versions of the same song simultaneously whilst manually controlling for speed (beats to the minute). Others edited tape recordings to meet their purposes, by sampling and splicing tapes, often literally "cutting and pasting" them, and by combining different tracks from one or more multi-track recordings. Remixers produced speedier versions of a song, a more stripped back sound, elongated songs to keep people dancing longer, and so on (Hawkins, 2004; Jacobson, this volume; Seggern, no date). When digital sound became the norm, all kinds of "sampling" techniques were applied, using different kinds of hardware devices or software on a computer.

The important point here is the innovative "make do" and "invent on the fly" character of this kind of remixing and modification of existing music. In the absence of specialist tools, techniques and knowledge for achieving certain purposes, people invented their own. In many cases they contributed

to developing techniques and defining tasks that record companies subsequently took up. In this way they anticipated present day digital media developments where, for example, video games fans have developed innovative and cost-effective ways of producing videos using game engines and screen-capture recording software, in a process known as machinima. The various aesthetic and video techniques employed in machinima have influenced role-play video game design itself (especially with respect to the increasing sophistication of cut-scenes between game segments or levels), along with commercial media, including television advertising (e.g., Volvo's "Game On" and Coca-Cola's "Coke side of life" commercials) and commercial entertainment (e.g., the "Make Love not Warcraft" episode of ***South Park*** and MTV's machinima music videos) (see also Knobel & Lankshear, 2008; Picard, 2006; Chapter 6, this volume).

Similarly to the case of music remixing, access to analogue video recorders and commercial videos led to the emergence of fan-based video remixing, using footage recorded from television or videos. This was a linear and often tedious process that typically required many hours of manually working two analog video recorders. DIY music videos were especially popular, and the first Anime Music Videos (AMVs) were made by fans using analogue tools.

One VCR would play the source footage tape while the other would record the footage onto the AMV tape. The creator would record a piece of footage, pause the AMV tape, find the next piece of footage to use, record, and continue to repeat the slow, tedious process through the whole AMV. Music was put in at the end, often recorded off of a CD or tape (Springall, 2004, p. 22).

By the mid-1980s, DIY media were already a well-established popular cultural pursuit across a range of analogue formats: notably, zines, music remixing, self-published comics and fan fiction, and video remixing, filmmaking, and groups recording their own music. The ease, scale, quality and social organization of engagement in DIY media have, however, undergone a quantum change from the mid 1980s, as digital electronic tools, production techniques, and electronically networked communications have become increasingly accessible (for detailed accounts see, for example, Benkler, 2006; Burgess & Green, 2009; Bruns, 2008; Jenkins, 2006a, 2006b; Lankshear & Knobel, 2006; Leadbeater & Miller, 2004).

The DIY media scene today

In the sense we are using it here, "DIY media" comprise digital entertainment and expressive media—animation, live action video, music video, music, spoken voice tracks, other artistic works—produced by everyday people to

meet their own goals and personal satisfactions. These goals and satisfactions might be associated with fanship in some larger phenomenon, affiliation with some social group, or interest in something particular, or might simply emerge out of having the opportunity to tinker with and explore the means for producing a media artifact of one kind or another.

DIY media in this sense are very much characterized by people being able to produce their "own" media—whether they be radio-like podcasts, "original" remixed music, animated video shorts, music videos, etc.—by making use of software, hardware and "insider" skills, techniques and knowledge that were previously the domain of highly-trained experts who had access to specialized and typically very expensive media production know-how, resources and spaces.

The increasing availability of free or almost free image, video and sound editing software, the increasing affordability of computers and digital still and video cameras (including free availability of such resources in a growing number of public libraries and community media centers), and the relative ease of finding online how-to guides, trouble-shooting help, raw resources (e.g., source video, sound effects) collectively make it possible for everyday people to become media ***producers*** rather than merely media consumers (Leadbeater & Miller, 2004; Shirky, 2008).

Axel Bruns (2008) takes this analysis further to argue for the emergence of "produsers." He explains how conventional distinctions between producers and consumers no longer hold within an online, networked economy and argues instead for recognizing a new hybrid: the ***produser***. A produser, according to Bruns, is an "active" and "productive" user (p. 23) of content created, developed, modified, and shared by a community. That is, produsers ***use*** rather than consume (i.e., "use up") artifacts, knowledge, information, content and other resources (p. 14). Within this model of active and productive use, content or artifacts "produsedd" by a community are always available to others and open to revision or reworking in ways, ideally, "which are inherently constructive and productive of social networks and communal content" (p. 23). The concept of produser captures how digital, distributed networks make possible non-hierarchical and open participation in online communities, the rapid sharing of ideas and resources, how users are able to tap into the collective intelligence of a group or community to contribute in small, modular ways to larger projects, and how knowledge can be used and shared among peers and experts. Bruns emphasizes the importance of internet-mediated networks and services—such as blogs, wikis, video-hosting sites, etc.—in helping make this possible.

Indeed, the genuine sophistication of even the most basic audio and editing programs and the possibility of drawing on existing media to resource DIY media projects mean it is quite possible for the everyday person to create a polished product without necessarily being "artistic" (i.e., able to draw

well, sing beautifully, play a musical instrument, take museum-quality photos, etc.). For example, as mentioned earlier, free screen-recording software (like Fraps), role-playing video games or 3D virtual worlds that provide characters and scenes, and free video editing software can be used to produce machinima (see Chapter 6, this volume). Previously, this kind of animated video typically required numerous key frame and in-betweener artists, expertise in animation and general film effects and techniques, and/or access to and facility with computers designed especially for creating or editing the animation (costing tens of thousands of dollars), studio space, musicians to create the video soundtrack, voice actors, expertise in the areas of animation and filmmaking, serious funding, and so on. Now, it is perfectly possible for someone without any formal training in film or animation techniques, and who cannot "draw to save him/herself," to create an engaging animation in their home office or bedroom.

A sense of the sheer scale and range of DIY media engagement today can be gauged from looking at the proliferation of user-content management websites that have sprung up online since the early 2000s. These kinds of service sites do not create their own content but, instead, make it possible for everyday users to post their own content online. Massive sites like YouTube, OurMedia.org, Stickam, Blip.tv, Flickr, Picasa, Photobucket, PodcastAlley, Podomatic, and LibSyn, to name just a few, fall into this category. Not all of the content posted by users to such sites is DIY—a good deal of it is taken directly from television, DVDs, radio, or from other online spaces (e.g., photos of celebrities, other people's music remixes), although Eric Garland (2008), who is involved in the online measurement business, argues that user ***redistributed*** content should be considered an important part of DIY media. At the time of writing, the video hosting service, YouTube, is attracting over a billion views a day; the photohosting site, Flickr, hosts more than a billion images; and the podcast-hosting site, Podcast Alley, hosts 4.7 million podcast episodes.

In addition to these massive sites, numerous more specialized online sites exist that have been purpose-developed for hosting particular kinds of DIY media. Typical examples, among many others, include:

- Machinima.com—with over 26,000 unique visitors in September 2009—for hosting machinima videos and spanning a large number of types of machinima—categorized according to the game engine they use, and searchable by the kind they are—drama, comedy, thriller, romantic, fantasy, sci-fi, etc.
- AnimeMusicVideos.org, or AMV.org—with over 23,000 unique visitors in September 2009—is devoted to hosting anime music videos (video remixes that use predominantly anime footage and are set to music). As with Machinima.com, AMV.org enables viewers to search for videos by

type (drama, comedy, romance, etc.) and by anime series (e.g., *Naruto, Great Teacher Onizuka, Evangelion,* etc.).

- Aniboom.com—with close to 68,000 unique visitors in September 2009—and Newgrounds.com—with 1.3 million unique visitors in September 2009—which host flash animations and flash games.
- StopMotionAnimation.com—with roughly 16,000 unique visitors in September, 2009—which hosts stop motion animations, spanning everything from claymation, doll and figurine animation, line-drawing animation, sand-based animation (2D and 3D), live action stop motion, everyday object stop motion, and so on.

DIY media creators often have a good sense of the professional standards typically applied to the media they themselves are creating (cf., comments by Matt in Chapter 9, this volume). This doesn't mean that working to professional standards is always a consideration in DIY media creation; the outcomes of rudimentary explorations of a new technique are often satisfying and sufficient. Morover, there are ample instances on YouTube of cellphone videos showing friends riding their bikes off piers or bridges into deep water (and all kinds of similar fare) to suggest that DIY media creation is often more concerned with maintaining social relationships than with exercising any will to production quality or conceptual sophistication. At the same time, accomplished DIY media creations reveal "amateurs working to professional standards" (Leadbeater & Miller, 2004, p. 9). Prior to the explosion of DIY media creation, knowledge of these professional standards was often confined to those who were highly trained in the area. These days, online how-to guides, dedicated open discussion forums where experts and novices alike can participate, help boards and blogs, user-created media content review and comment spaces, and ready access to what are regarded as exemplary models of the target media artifact make many elements of "professional standards" explicit and accessible to the everyday person (e.g., amateur anime music video makers committed to professional standards know that good quality AMVs don't include clips that are subtitled or have different screen resolutions from one another, that they avoid clichéd transitions between clips, and so on).

DIY media as a window on the contemporary

Part of our interest in DIY media stems from how experiences of creating and learning to create new media through participation in popular cultural pursuits employing new technologies within a range of "affinity spaces" (Gee, 2004) can be seen as instantiating and illuminating some important current trends to do with "how we identify ourselves, participate with others, connect with others, mobilize resources and learn" (Hagel & Seely Brown, 2005, p. 3). DIY media provide a window on some distinctively contemporary ways of "being in the world." In this section we will briefly address some aspects of identity, participation, resource mobilization and learning.

Identity

Identity is widely identified as a key to understanding entrée into and sustained participation in cultural practices of creating and sharing digital media within such pursuits as fanfiction writing, video game building or modding, creating movie trailers for fictional movies, music remix, and so on (see, for example, Alvermann et al., 2007; Alvermann & Heron, 2001; Black, 2007, 2009; Burn, 2008; Chandler-Olcott & Mahar, 2003; Gustavson, 2008; Hull, 2004; Lam, 2000; Pleasants, 2008; Thomas, 2007a, 2007b). In his recent discussion of "the digital society," Allan Martin (2008) presents a helpful line of argument for understanding why identity work has become such a visible focus of activity within contemporary daily life. Martin builds on work by people like Bauman (2000), Beck (1992), and Giddens (1999) to argue that under current conditions within societies like our own—where "the classical industrial order" prevalent from the mid-19th century has gradually dissolved into a society "of uncertainty and risk"—constructing individual identity has become "the fundamental social act" (Martin, 2008, p. 153). The declining significance of industry (and social class categories tied to types of employment), nation state, and institutionalized religion, which were "the three pillars of the 'modern' order," has robbed individuals of the "certainties . . . of work, order and belief" that they had long provided (ibid.). The idea of "the long term" has become increasingly meaningless, and for people enduring these *post*-modern conditions "life has become an individual struggle for meaning and livelihood in a world that has lost its predictability" (ibid.). As Martin puts it:

> The taken-for-granted structures of modern (i.e. industrial) society–the nation-state, institutionalized religion, social class–have become weaker and fuzzier as providers of meaning and, to that extent, of predictability. Even the family has become more atomized and short-term (2008, p. 153).

In the face of these conditions, says Martin, constructing individual identity "becomes the major life project" (ibid.), and within the daily pursuit of this end, consumption, community-building, and digital culture converge in interesting ways. Ways and styles of consuming—such as owning particular artifacts, or being a fan—become "badges of order" (p. 153) that offer at least some temporary or provisional sense of normality and existential safety. Since we can no longer take "the community" (as we previously knew and experienced it) "as a given that confers aspects of identity" (ibid.), the

processes of building communities and actively finding communities to become involved and participate in have become "conscious action-forming parts" of constructing individual identity. Digitally-mediated participation in affinities and communities assumes major proportions in this context, including, of course, becoming involved in creating and sharing digital media. Martin notes that within societies like our own, digital tools have become an almost ubiquitous means for people to present themselves to society at large. They can do this

> by creating and broadcasting statements (developing blogs or personal websites, contributing to online fora, sending email, texting, presenting a curriculum vitae, etc.) or multi-media objects (mounted on social collection sites). [Digital tools] also enable social identity development, making oneself in interaction with others, members of "strong" groups such as family or friends, or "weak" groups such as online "communities" (2008, p. 155).

From this perspective, the nature and significance of high-investment participation in digital media affinities for doing identity work can be understood as an integral and radically coherent dimension of being a contemporary person living a contemporary life. We think it is especially important for educators and caregivers to consider this perspective when reflecting on (or worrying about) the kinds of investments young people make in pursuits like creating, sharing, and otherwise interacting around digital media creation and the kinds of preferences and priorities they exercise with respect to activities they choose to engage in most energetically and enthusiastically.

Participation

The phenomenon that Henry Jenkins identifies as an emerging ***participatory culture*** is crucial to understanding contemporary social and cultural life. Participatory culture is what happens when "consumers take media into their own hands" and become actively involved in contributing to cultural development through creating media, sharing it, and responding to it (Jenkins, 2006, p. 132; see also Benkler, 2006; Bruns, 2008; Chapter 3, this volume). Participation, in this sense, describes how consumers themselves can be media producers, side-stepping, or, at least, reconfiguring traditional relationships with broadcast media companies that previously placed consumers in passive, receiver roles. Jenkins claims that "[t]he power of participation comes not from destroying commercial culture but from writing over it, modding it, amending it, expanding it, adding greater diversity of perspective, and then recirculating it, feeding it back into the mainstream media" (Jenkins, 2006, p. 257; see also Bruns, 2008, p. 93). To participate in this kind of culture is to be both a consumer ***and*** a producer who contributes

actively—albeit to varying degrees and in varying ways according to interest, time, resources, etc.—to the media available for others to view, listen to, read and enjoy and use in turn.

In an influential occasional paper published jointly by MIT and the MacArthur Foundation, Jenkins and colleagues (2006, p. 8) explain the rise of participatory culture in terms of social and cultural responses to "the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate, and recirculate media content in powerful new ways" (Jenkins et al., 2006, p. 8). They define a "participatory culture" as one:

> 1. With relatively low barriers to artistic expression and civic engagement
>
> 2. With strong support for creating and sharing one's creations with others
>
> 3. With some type of informal mentorship whereby what is known by the most experienced is passed along to novices
>
> 4. Where members believe that their contributions matter
>
> 5. Where members feel some degree of social connection with one another (at the least they care what other people think about what they have created). (Jenkins et al., 2006, p. 7)

In the context of a much larger discussion of media education for the 21st century, Jenkins and colleagues highlight the creative and innovative dimensions of participating in what Gee calls affinity spaces. They identify affinity spaces as "highly generative environments, from which new aesthetic experiments and innovations emerge" (2006, p. 9) and argue that participating regularly in affinity spaces develops a range of skills and proficiencies that are likely to prove valuable in the workplace, as well as for being able to most fully enjoy one's interests (ibid., p. 10). These include: being comfortable with communicating via a range of electronic modes, being able to multitask and make rapid decisions, being able to navigate and process information obtained from a range of sources, being able to collaborate with diverse others.

With respect to our focus on DIY media specifically, Rebecca Black illuminates this generative nature of participating in affinity spaces in her own study of fan fiction writers (e.g., Black, 2007, 2008). Black describes how three fans of anime (e.g., the *Card Captor Sakura* series) became successful writers of fan fiction (stories based on existing media narratives and written by fans). These writers—all of whom were English language learners—wrote fanfics which they posted to the website Fanfiction.net, the premier online fanfic-hosting website. Over time, based on feedback received from other writers, they enhanced their creative narrative writing prowess, and each developed a large following of readers. In these cases, the affinity space com-

prised commercial anime series, fan websites and discussion boards devoted to these series, FanFiction.net (where authors can be reviewers and reviewers authors, regardless of writing expertise or number of fanfics posted to the site), and the availability of all kinds of informal support services (such as beta-readers who will read a story before it's posted online for public reading to help with editing and smoothing the prose).

Black documents how obtaining reviews from strangers provided her three informants with powerful motivation to continue writing and posting to the site. She further explains how participating in this site encourages and supports writers in developing original and innovative storylines, even if many of their principal characters are taken from existing commercial media. For example, one of her study participants explained in an interview (Black, 2006, p. 16) that when she realized that many of her readers had little understanding of Chinese and Japanese history she wrote two fanfics in response. One combined elements of the movie, *Memories of a Geisha*, and the anime character, Sakura (from the *Card Captor Sakura* series). The other was "set in 1910 Kyoto, Japan, [and centered] on Sakura's struggles with an arranged marriage" (ibid.).

Mobilizing resources

In their introduction to a stimulating discussion of emerging models for mobilizing resources, John Hagel and John Seely Brown (2005, p.1) remind us that in the course of their daily lives people perceive and act on the basis of "'common sense' assumptions about the world around us and the requirements to meet our goals" (ibid.). Such assumptions collectively make up "common sense models" for judgment, decision-making and action within everyday routines. Hagel and Seely Brown claim that each major technology shift generates a new common sense model, and that in the context of contemporary technology innovations—notably, the microprocessor and packet-switched electronic networks dating from the 1970s—we are now "on the cusp of a shift to a new common sense model" that will reshape many facets of our lives (ibid.).

Interestingly, in terms of our focus in this book, Hagel and Seely Brown identify digital media as a key domain within which early signs can be found of an important shift toward a new common sense model of how best to mobilize resources under foreseeable conditions of uncertainty, and where a focus on sustainability of resources will become increasingly important. They describe this emerging new common sense model in terms of a shift away from "push" approaches toward "pull" approaches. This shift can in turn be understood in terms of a convergence between the twin needs to confront uncertainty (itself partly a consequence of recent technological innovations)

and to promote sustainability, on the one hand, and the opportunities technological innovations offer for meeting these same needs, on the other. Hagel and Seely Brown's argument has particular relevance to educators, because education/learning is a major sphere of resource mobilization, and to the extent that the projected shift from "push" to "pull" plays out, education/schooling will be impacted in far-reaching ways.

Very briefly, throughout the 20th century the dominant common sense model for mobilizing resources was based on the logic of "push." Resource needs were anticipated or forecast, budgets drawn up, and resources pushed in advance to sites of anticipated need so they would be in place when needed. This "push" approach involved intensive and often large-scale planning and program development. Indeed, Hagel and Seely Brown see programs as being integral to the "push" model. They note, for example, that in education the process of mobilizing resources involves designing standard curricula that "expose students to codified information in a predetermined sequence of experiences" (p. 3). Education, in fact, is a paradigm case of the push model at work.

According to Hagel and Seely Brown we are now seeing early signs of an emerging "pull" approach within education, business, technology, media, and elsewhere, that creates *platforms* rather than programs: platforms "that help people to mobilize resources when the need arises" (p. 3). More than this, the kinds of platforms we see emerging are designed to enable individuals and groups to do more with fewer resources, to innovate in ways that actually create new resources where previously there were none, and to otherwise add value to the resources we have access to. Pull approaches respond to uncertainty and the need for sustainability by seeking to expand opportunities for creativity on the part of "local participants dealing with immediate needs" (p. 4). From this standpoint, uncertainty is seen as creating opportunities to be exploited. According to Hagel and Seely Brown, pull models

> help people to come together and innovate in response to unanticipated events, drawing upon a growing array of highly specialized and distributed resources. Rather than seeking to constrain the resources available to people, pull models strive to continually expand the choices available while at the same time helping people to find the resources that are most relevant to them. Rather than seeking to dictate the actions that people must take, pull models seek to provide people on the periphery with the tools and resources (including connections to other people) required to take initiative and creatively address opportunities as they arise . . . Pull models treat people as networked creators (even when they are customers purchasing goods and services) who are uniquely positioned to transform uncertainty from a problem into an opportunity. Pull models are ultimately designed to accelerate capability building by participants, helping them to learn as well as innovate, by pursuing trajectories of learning that are tailored to their specific needs (p. 4)

We see all this, *par excellence*, in contexts of participation within DIY media affinities. Affinity spaces are paradigm instances of the kinds of platforms Hagel and Seely Brown have in mind. Their expansive character in terms of creativity and innovation is precisely what Jenkins and colleagues (2006) mean when they identify affinity spaces as *generative* environments. Indeed, the logic of the "pull" platform is precisely the logic of "participatory culture," viewed from the standpoint of resources and creativity.

Hagel and Seely Brown describe the emergence of pull approaches within media production (see also Bruns, 2008). DIY media producers take existing media resources and customize them to their individual needs, tastes and purposes—often with collaborative support of others—thereby creating an expanded range of media choices for others (cf. Hagel & Seely Brown, 2005, p. 6). This occurs at different levels and intensities of interaction and engagement.

> At the most basic level, younger generations of customers are increasingly customizing media to better suit their individual needs. For example, rather than relying on music companies to pre-determine the mix of songs on a CD . . . music listeners are [increasingly] downloading individual tracks and assembling [and sharing] their own tailored sequence of songs. (ibid.)

At another level, podcasters are sharing "their customized selections of music from many different artists with friends and wider audiences" (ibid.). At still another level, machinima movies made using massively multiplayer online role-playing games can involve large-scale collaborations. Because of the distributed nature of much of this kind of collaboration it is possible that many of those involved never meet face-to-face during—or even after—the project. "Illegal Danish Super Snacks" is a well-known machinima made within the online role-playing game, *World of Warcraft* (see: http://machinima.com/films.php?id=1940), and was shortlisted for a U.S. Machinima Award in 2007. This 20-minute video was a collaborative effort involving around 100 individual players from several countries—each operating their own game character within a series of designated locations within the game—along with 10 voice actors. A number of participants never met each other or the director of the machinima.

DIY media creators, then, can be seen as early exponents of "pull" approaches to mobilizing, using, and expanding resources. This further affirms their presence at the leading edge of contemporary trends.

Learning

Scholars like Rebecca Black (2008), David Buckingham (2003), Andrew Burn (2009), Julia Davies and Guy Merchant (2009), James Gee (2003, 2004, 2007), Henry Jenkins (2006; Jenkins et al., 2006), Marc Prensky (2006), Will Richardson (2006), Katie Salen (2008), John Seely Brown and Richard Adler (2008), and Constance Steinkuehler (2008), among others, have discussed at length how online resources and popular cultural affinities have converged in ways that enable and sustain modes of learning very different from the predominantly "push" approach of conventional schooling. Seely Brown and Adler (2008) discuss this convergence in relation to how new technologies have helped leverage the potential of "social learning" and then consider how these technologies might further contribute to the development of a "demand" or "pull" approach to learning—Learn 2.0—that will "better serve the needs of twenty-first century students" (p. 20).

By "social learning," Seely Brown and Adler mean learning based on the assumption that our understanding of concepts and processes is constructed socially in conversations about the matters in question and "through grounded [and situated] interactions, especially with others, around problems or actions" (2008, p. 18). From a social learning perspective, the focus is more on *how* we learn than on *what* we learn. It shifts "the emphasis from the content of a subject to the learning activities and human interactions around which that content is situated" (p. 18). This is just the kind of engagement and process a DIY media creator experiences when, for example, s/he interacts with peers to resolve (what turns out to be) a file compatibility or file conversion problem in the course of creating an AMV or a machinima movie.

Social learning also puts the emphasis squarely on "learning to be" (Seely Brown & Adler, 2008, p. 18; Gee, 2007, p. 172). According to Seely Brown and Adler (2008, p. 19), mastering a field of knowledge involves not only "learning about" the subject matter but also "learning to be" a full participant in the field. This involves acquiring the practices and the norms of established practitioners in that field or acculturating into a community of practice.

In the case of Rebecca Black's fan fiction writers mentioned previously, they are not learning fan fiction content *per se* but, rather, learning to be proficient/better/successful fanfiction authors—and learning a lot *about* fan fiction as a social practice in the process. In Chapter 9, our co-author and informant, Matt, describes key aspects of his own endeavors in learning to be the best AMV creator he can be.

With respect to burgeoning Web 2.0 resources and the possibilities for a Learn 2.0 model grounded in a social learning ethos, Seely Brown and Adler (2008) claim that resources like blogs and wikis, mashups, social networks and social network sites like Facebook or Orkut, content-sharing sites, online affinity spaces and the like, exemplify

> [a] new user-centric information infrastructure that emphasizes participation (e.g., creating, remixing) over presentation, that encourages focused conversation and short briefs (often written in a less technical, public vernacular) rather than traditional publication, and that facilitates innovative explorations, experimentations, and purposeful tinkerings that often form the basis of a situated understanding emerging from action, not passivity (p. 30).

In a parallel argument to that presented by Hagel and Seely Brown (2005) about approaches to mobilizing resources, Seely Brown and Adler argue that current and foreseeable challenges posed by uncertainty and sustainability portend a need to move from a "push" approach to learning—that builds up "an inventory of knowledge in students'" heads—to a "demand-pull" approach. A pull approach shifts the emphasis toward "enabling participation in flows of action," focusing on "'learning to be' through enculturation into a practice as well as on collateral learning" (Seely Brown & Adler, 2008, p. 30). Such an approach would involve "providing learners with access to rich (sometimes virtual) learning communities built around a practice"—and resourced as appropriate from the bounty of the internet. Learning would be "passion-based": that is, "motivated by the learner either wanting to become a member of a particular community of practice or just wanting to learn about, make, or perform something" (ibid.).

This, of course, is the kind of learning that participants involved in the kinds of pursuits described in this book ***already*** engage in on a daily basis. It is steeped in values, processes, and forms of interaction that many young people associate with their ***norm*** for learning.

Overview of the book

The DIY media practices in which young people engage are many and diverse. There is not space to deal with all or even a majority of them here. The following chapters address music remix, podcasting, photosharing, photoshopping, machinima, flash animation, stop motion animation, and anime music videos. This selection aims to provide readers with a general introduction to a set of DIY media practices that are currently popular among young people and that are also sufficiently straightforward and accessible for "newbies" to muck around with and explore. Furthermore, the practices selected for treatment here mean that much of the book's content transfers well to other kinds of DIY media. For example, the video editing techniques described in Chapters 7 and 9 can be applied to creating live action videos and video remixes. The audio editing techniques described in Chapters 2 and 3 can be used to create soundtracks for more complex audiovisual projects. Archiving and tagging photos—discussed in Chapters 4 and 5—can inform a range of complex DIY media projects, such as large-scale, collaborative photo

narratives or a series of user-created comics. At the same time, we are conscious that a range of popular DIY practices have, of necessity, been omitted. These include making live action videos (popular among live action role-players and cosplayers); non-commercial newsblogs; wikis; blog fiction and fictional blogs; digital music creation; digital art; videoblogging; comics/graphic novels; video remixes of different kinds (such as those focusing on political commentary, satire, parody, spoofing, etc.); eyewitness videos about newsworthy events (e.g., Witness.org); live-casting online (e.g., using Yahoo Live, or Justin.tv); to name just a few. We hope that the combined efforts of the authors in this collection will stimulate others to pick up some of the options we have had to pass up here.

The book has been organized in three parts: audio media, still media, and moving media—which might equally well be described as focusing on the audio, the visual and the audiovisual. From the outset we aimed to ensure that the book did not become dominated by one type of DIY media. Thinking in terms of *types* of DIY media was useful in this respect. The order of the sections isn't important and does not imply, for example, that podcasting is "easier" or less sophisticated than, say, creating machinima. Rather, organizing the book the way we have is intended to encourage readers to begin to form their own folksonomies around different ways of thinking about types of DIY media.

Finally, despite their scale and significance within popular culture, a number of the practices addressed below, such as creating flash animation and machinima, have received little research and scholarly attention to date. This book aims to help bring them into the frame.

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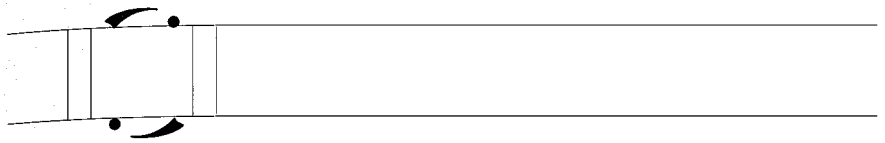

Part 1: Audio Media