

5-2018


# Glocalizing the Composition Classroom with Google Apps for Education

Daniel L. Hocutt

*University of Richmond*, dhocutt@richmond.edu

Maury Elizabeth Brown

Follow this and additional works at: <https://scholarship.richmond.edu/spcs-faculty-publications>

 Part of the [Education Commons](#), and the [Other Computer Sciences Commons](#)

---

## Recommended Citation

Hocutt, Daniel, and Maury Elizabeth Brown. "Glocalizing the composition classroom with Google Apps for Education." In *Thinking globally, composing locally: Rethinking online writing in the age of the global Internet*, edited by Rich Rice and Kirk St. Amant, 320-339. Louisville, CO: Utah State University Press, 2018.

This Book Chapter is brought to you for free and open access by the School of Professional and Continuing Studies at UR Scholarship Repository. It has been accepted for inclusion in School of Professional and Continuing Studies Faculty Publications by an authorized administrator of UR Scholarship Repository. For more information, please contact [scholarshiprepository@richmond.edu](mailto:scholarshiprepository@richmond.edu).

## 15

# GLOCALIZING THE COMPOSITION CLASSROOM WITH GOOGLE APPS FOR EDUCATION

Daniel Hocutt and Maury Brown

### ABSTRACT

Composing practices in a digitally networked world are inherently intercultural, and situate local needs and constraints within global opportunities and concerns. Global technologies like Google Apps for Education (GAPE)<sup>1</sup> allow students to compose collaboratively across place and time; to do so, students and teachers must navigate a complex local network of institutional policy, learning outcomes, situational needs, and composing practices while also being aware of the global implications of using the interface to compose, review, edit, and share with others. The chapter describes using GAPE in locally situated composition classes. Using such technologies requires a focus on glocalization and an understanding of how networked composing activity affects the communication process, and the institutions, faculty, and students who are interconnected within it.

*Keywords:* cloud-based computing, cloud pedagogy, computers and writing, digital literacy, digital writing, first-year composition, glocalization, Google Apps for Education (GAPE), Google Docs, Google Drive, ICT, networked individualism, networked knowledge communities

### INTRODUCTION

When composing in digital environments, we entangle ourselves in a global web of networks. As Reid (2008) points out, today's composing technologies are "designed, produced, and assembled through a global network of companies and factories," and that in using these technologies we "necessarily hand over some of the creative process and decision-making responsibilities of authorship to the computer" (p. 68). Whether using commercial hardware and software, freeware, learning management

systems, or open source solutions, teachers, students, and institutions must agree to the terms of service and conditions of use defined by networks of corporate entities. Adoption of these information communication technologies (ICTs) creates an evolving online global context where our identities and our practices are influenced in visible and unseen ways. Institutions, faculty, and staff who use such ICTs must therefore be aware of the global contexts and ideologies inherent in the interface and made manifest through use while seeking to critically examine how such ICTs affect communication, composing practices, and how we teach them.

Global technology giant Google offers services to consumers in exchange for the information they provide. With strongholds in Internet searching, electronic mail, video streaming, and mobile phone industries, Google offers a suite of services free of charge to K-12 and higher educational institutions: Google Apps for Education (GAPE). The suite of cloud-based software and services provides collaborative functionality for the classroom through email and shared drive applications, as well as open source software that mimics the functionality of Microsoft's Office Suite: Word (functions mimicked by Google Docs), Excel (Sheets), PowerPoint (Slides) and Outlook (Gmail, Contacts, and Calendar). Cloud-based services designed for educational use (e.g., GAPE) afford deeply collaborative activities across multiple applications and interfaces. Google Drive and Google Docs provide shared folders for exclusive, password-protected file sharing and free web- or app-based word processing. Google Docs also offers the opportunity for both asynchronous and synchronous exchange.

As scholars have noted, digital technologies are never neutral (Feenberg, 1991; Selfe & Selfe, 1994). GAPE is no exception. Although there are uses of the technology "for good," and there are promises of improved access to education and equalized spaces, as Selber (2004) notes, "computer technologies are aligned with competitive and oppressive formations that tend to shore up rather than address existing social inequalities" (p. 12). DePew (2015) points out that "despite the 'kumbaya rhetoric' of global equality that digital corporations use to sell their wares, at the end of the day these companies need to turn a profit" (p. 446). When higher education institutions adopt these products and instructors use them, instructors and institutions may be complicit in allowing student work and activity to be mined for profile building and targeted advertising. Using these technologies positions instructors as potential agents of enacting or perpetuating inequalities, exploiting students' labor, or compromising their privacy. Yet even in the global network of Google, composing acts are locally mediated and situated.

The chapter frames GAFE in the context of glocalization and networked individualism, and provides heuristics for others to consider when implementing GAFE in the composition classroom. First, we place this study within the context of current digital composing theory and praxis. Then, we discuss the local uses of GAFE in first-year composition (FYC) classes at a public community college and a private university's professional and continuing studies division. We identify global and local implications for decisions made to implement GAFE for composing, revision, and assessment, with regard to both technological and pedagogical affordances and constraints. We demonstrate that the use of GAFE in the composition classroom creates a glocal system of networks within networks, whereby the individual negotiates within and among local and global communities and cultures.

#### REVIEW OF THE LITERATURE

Networks, as Castells (2010) notes, "have become the predominant organizational form of every domain of human activity" (p. xlv). He introduces one type of network, the "space of places" (p. xxxi), described as "horizontal networks of communication built around people's initiatives, interests, and desires [that] are multimodal and incorporate many kinds of documents" (p. xxviii). When GAFE is implemented, its interface enacts and makes visible this often invisible or implied network of communication and learning. Castells introduces another type of network, the vertical "spaces of flows" (p. xxxii), which he describes as "the material organization of time-sharing social practices that work through flows" (p. 442). The synchronous and asynchronous collaborative activities offered on a global scale as part of Google's multinational networked corporate entity reflect the global environment, or space of flows, which mediates and connects the space of places. Castells depicts the space of places as horizontally contiguous and in tension with, but not in binary opposition to, the vertically networked space of flows (pp. xxxvii, xxxix). Students using GAFE are connected in terms of both "place" (the interface, reconstituted among multiple devices and physical locations) and "time" or "flow" (composition, collaboration, revision, and communication conducted among flash groups of individuals in the network). Castells describes this contradiction in terms of power structures: "cultural and social meaning is defined in place terms, while functionality, wealth, and power are defined in terms of flows" (p. xxxix).

Appadurai (1990) describes this contradiction as disjunction between heterogeneity and homogeneity and emphasizes the networked nature

of cultural flows illustrated as “the relationship between five dimensions of global cultural flow which can be termed: (a) ethnoscaples; (b) mediascaples; (c) technoscaples; (d) finanscaples; and (e) ideoscaples” (p. 296). These dimensions of cultural flow represent relationships and tensions in continual flux among multiple facets of culture, not binaries in opposition to one another. Castells and Appadurai recognize cultural meanings and economic power flow among and along disjunctions in vast and complex global networks. Students who use GAFE, in turn, enter the space of places at the local level, and join the space of flows as they are connected, through the interface, to larger global systems of network technology and infrastructure, multicultural values and ideologies, and laminated global networks of trade (Appadurai, 1990; Castells, 2010). Students, and their instructors and institutions, negotiate between maintaining a sense of individual identity and needs and fitting those ideas into a more global landscape of what constitutes knowledge, employability, and actualization. The tension and negotiation is not *between* the “world of work” and the “world of school” but more the “world of work” *in* the “world of school.” In the space of flows and the space of places, the multiple facets of cultural flow are simultaneously exchanged, enacted and enforced, creating tenuous and negotiated situated identities, individuals within a network, a local within a global.

Cloud-based computing applications such as Google Apps for Education enable and make manifest the networked individualism of glocalization. The student, faculty member, classroom, and writing process and products are always-already part of the global network; GAFE reveals it explicitly. OneDrive’s use in educational contexts is a way to support global and networked activity and to develop an awareness of cross-cultural communication and the social nature of composing. When installed as the default file sharing service for an institution, GAFE affords the kind of collaborative composing, reviewing, presenting, and assessing practices encouraged by contemporary composition theory (see Yancey, 2004; J. Rice, 2006; Smith, 2008; Alexander, 2009; and Bridwell-Bowles, Powell, & Choplin, 2009). GAFE represents a space of flows in which composing actor, composing medium, instructor, peers, pedagogy, assessment, and composing practices flow across global networks and local spaces. The local use of GAFE as a composing tool creates a networked learning environment that is a “thoughtful fusion of face-to-face and online learning experiences” (Garrison & Vaughan, 2007, p. 5). As a networked blended learning environment, composition classes that incorporate GAFE rely on socially constructive theories of composition and on the concept of glocalization, through which local

activity is seen on a continuum with the global, with local agency reiterated within the larger networked activity of the global through myriad connectivities (Robertson, 1995).

As a composing environment, the networked use of GAFE can create a community of learners. Using sharing permissions among all class members focused on a common assignment or outcome liberates invention, composing, peer review, and revision practices from solitary activities of individual students to social activities within a community of learners. Within this community, concepts sometimes seen as more fixed, such as “student,” “teacher,” “draft,” “process,” and “product” are all remediated (Bolter & Grusin, 1996) as students and instructors take advantage of GAFE networked capabilities. Students and teachers alike transition from operating within a high-context classroom environment where meanings are fixed and understood within Hall’s (2007) “dominant-hegemonic position” (p. 485) to operating within a low-context classroom environment where meanings and identities are fluid and decoded in a “globally contrary way” (p. 487). In the classroom glocalized using GAFE, classroom concepts and identities are encoded and decoded not via a singular model of changing  $x$  to  $y$ , but in a dynamic and recursive ecosystem that resonates with Hall’s dynamism, Appadurai’s scapes, and Castells’s intersecting spaces of flows and places.

Collaborative composing is rooted in writing’s social aspects (Miller, 1984, 1994; Bazerman, 1994, 2004, 2013; Gaillet, 2009). Collaborating in the same document, on the same assignment, as part of an intentional community of learners, replaces the writer/reader binary and its corollary, “the individual who works in one fixed space within a fixed disciplinary focus with a single identity tied to a singly motivated reading practice tied to a single idea expressed at a single moment” (Rice, 2006), with a far more social actor in a complex, networked space (Latour, 2005). When Bezemer and Kress (2008) consider current and future understandings of “text” and “genre” in composition studies, they invoke the social dimension of composing in multimodal texts: “Every text has a generic form. Each of these frames/genres defines text in terms of activity, of social relations of participants in an event, and in terms of the use of modes and media” (p. 173). Collaborative writing using Google Drive is a frame that defines text in terms of activity (collaboration), social relations (a community of learners), and the use of modes (synchronous or asynchronous commentary, synchronous chat, collaborative revision) and media (the virtual page in a digital network). Collaborative composing is a networked activity (Bazerman, 2004), and by using GAFE in educational settings or similar Google Apps in

workplace settings, networked composing activity can easily join similar activity among writers anywhere across the globe, each local group itself functioning within a network or networks.

boyd (2007) notes that digital spaces give young people a sense of autonomy and power. Students who compose with networked technology have access to tools that enable practices and relationships that are unavailable using analog or non-networked composing methods. Using GAFE serves to help level the playing field of access to technology and to powerful digital spaces. However, Vaidhyanathan (2008) points out “the levels of comfort with, understanding of, and dexterity with digital technology varies greatly within every class” (p. B7).

These variances are wider at open access institutions with more diverse student populations. The individual student is the hyper-glocal network node, and although digital technology such as GAFE is implemented on the institutional and classroom level through a connection to the global network of possibilities, the availability of an affordance does not equate to the ability to perceive, access, manipulate, or master it. Social constructionists and postmodernists acknowledge texts are inherently social artifacts, but, as Johnson-Eilola (1998) notes, teachers tend to be rooted to composition practices that privilege individual authorship as final product (p. 17). Using GAFE challenges this bias by enabling access to collaborative process. While meeting the outcomes of the course, students develop skills in workflow process, writing process, and knowledge management. They also practice multimodal literacy (“Council of WPA,” 2014) while composing in multiple environments and build digital literacy and collaborative skills that are privileged in a globalized economy and networked society.

#### **IMPLEMENTING GAFE IN THE FIRST-YEAR COMPOSITION CLASSROOM**

The authors were engaged in a multi-semester implementation of GAFE in the first-year composition classroom at their respective open-access institutions: a rural/suburban community college and the school of professional and continuing studies at a private liberal arts university. Through a continuous improvement model, the authors have used student feedback from a mixed-methods study, analysis of student artifacts, and participant-observer ethnographic observations and reflections to guide their iterative implementation. Beginning in spring 2014, the GAFE interface was used with students in first- and second-semester composition courses, as well as developmental courses that prepare

students for credit-bearing English. Both authors' institutions have adopted GAFE as the primary interface for student email, and all enrolled students have access to the suite of applications and cloud-based storage. Slight variations in the way each author's respective institution implemented GAFE required some customization of the tool to meet the local constraints and student needs.

The extensive use of GAFE made each course section a blended instructional environment. Students used the GAFE interface to interact with course content and each other synchronously as well as asynchronously throughout the semester. Using GAFE leveled access to word processing software, making composing, reviewing, and/or revising available across multiple platforms and allowing students to use their own devices. Teaching with GAFE also taught composing as a network experience. As a result, student familiarity with the composing process and the technology used to create compositions increased throughout the semester with recursive and scaffolded practice.

Two sharing practices were tested with students: one enabled all students and the instructor to view all class members' composing activities; the other allowed the instructor to view all class members' activities and selected members of student groups to view reviewing, revising, and proofreading activities of other students (see Table 15.1). The activity itself was made possible and visible by the web-based tool. The fact that the instructor could observe the traces of a student's activity, even if deleted by the student, led to both a sense of personal accountability and awareness of being watched throughout the composing process, regardless of whether it took place in what may have previously been considered an instructional setting. Glocalization, as enabled by implementing GAFE for collaborative composing in local classes, can replace "one-size-fits-all" implementations of technology with glocalized flexibility. Glocalization as a space of flows represents networked individualism and encourages a localized approach that reflects the specific setting and context in which GAFE is implemented. As a result, the authors were able to respond to local considerations and personal preferences with two different strategies for using GAFE for collaborative composing, as depicted in Table 15.1.

The affordances that make possible collaborative composing in the local classroom also contain the potential for collaborating beyond local boundaries. Composing practices can be traced along a vertical network of power (Castells's "space of flows") running from the student writer through the instructor, the institution, and ultimately to Google; composing in this vertical network required students to monitor and modify



Table 15.1. Differentiating Google Drive Sharing Strategies.

<i>Strategy</i>	<i>Glocal Implementation #1</i>	<i>Glocal Implementation #2</i>
Folder ownership	Single folder shared by instructor with students in a single course section.	Student folders shared with instructor.
Sharing access	All students in class have access to all files by default.	Other students have access to files only with explicit permission.
Institutional configuration	Shared folder created through instructor's institutional account; all students within single Google Apps license and domain.	Student folders (except those of school staff who were students) created through students' institutional account; staff and instructor used personal Google account.
"Pushing" content to students	Students and instructor able to push a single resource to all others via shared drive.	Instructor only able to push resources into individual student shared folders.
Collaboration	Any student could collaborate with any other student at any time. Dynamic, student-selected (but teacher-managed) collaborative groups that changed over time.	Students selected whom to share files with, and when. Primarily worked in teacher-directed groups.
Surveillance	All students and instructor could see all changes made to any document in real time. Entire writing process revealed as it unfolds.	Students decided at what point in composing process to reveal their document with others. Writing process revealed through document history.
Networked activity	Students were connected to all other students in the course as well as the instructor at all times. One main network with composition product as the unit of operations.	Students were connected to selected students in sub-networks within the larger network of the class, visible only to the instructor. Multiple smaller networks linked together; student as the unit of operations.

their behavior in the community, ensuring their activity was circumspect, appropriate, reasonable, and timely. While students composed and collaborated in this vertical network, they also co-created a horizontal network (Castells's "space of places") that led to social learning.

In narrative feedback, students valued participating in networked activities made possible by GAFE. For example, students valued the opportunity to provide and receive feedback beyond the time and space of the class itself, and they appreciated the ability to compose on any Internet-connected device. One student wrote, "I liked that I was able to peer review at home and receive comments on my paper online, so that I could go back and revise my paper" while another appreciated "being able to peer review others work without the pressure of time in the classroom and distractions." Others valued the unique GAFE ability that enables multiple class members, students and instructors alike, to actively compose in a single document synchronously and

asynchronously. Students valued specific GAFE functions like “the ability to collaborate with my instructor and classmates on one document” and “being able to partner and communicate with my peers” while recognizing the generalizable value of the composing community to their individual work: “the peer review and comments from our professor were extremely helpful and much appreciated.” The GAFE interface places the local within the global, and vice versa, opening opportunities for shared learning whenever two or more collaborators interacted synchronously or asynchronously.

In addition, the lack of anonymity and archiving of network activity allowed for writing and peer review processes to be assessed. Students could see each other’s work at all stages of the writing process, from brainstorming and invention to revising and proofreading. Students were asked to comment on a minimum number of peer documents, under deadline constraints, and governed by rubrics concerning peer review activity. These activities were modeled synchronously, during face-to-face (F2F) class-time, often using the projector to view real-time collaboration and the dynamic changes to a document as students offered and accepted feedback. Their activity was visible inside the documents and via revision history to other students in the class.

Opening up to this level of vulnerability required careful attention to building a community of trust, especially during the F2F course sessions, so that it was replicated and recognized within the virtual GAFE network. The glocalized shared community offered a buffer and support network within the Googleverse, and instructors could manage the levels of trust and vulnerability through the sharing privileges of documents within GAFE, so that it would extend to the community created in GAFE. Instructors used F2F classroom sessions to address, assess, and evaluate local student activities while simultaneously explaining, customizing, and implementing the transparent networked GAFE interface. Instructors served as glocalizers for students by connecting the local classroom to the global network through GAFE, by encouraging students to be more aware of their membership in a global community, and by helping students develop a glocal perspective.

## APPLICATION

We sought to define questions and considerations about implementing GAFE in the FYC classroom as a collaborative composing medium that would dovetail with composition theory and pedagogical best practices. As such, it could have potentially served as a guideline for others to create

their own implementation in other courses and institutions. DePew (2015) notes “individual institutions have to work within their given parameters to create the most effective experiences for all students” (p. 445), reiterating the necessity of glocalization. The heuristic below (Table 15.2) lists questions to ask when considering using GAFE as a pedagogical tool, and breaks them down into three categories related to the institution, faculty, and students. These are divided into the local concerns, where there is agency to affect the implementation, and global concerns, where there is little or no agency, only awareness and mitigation. Together, they offer a way to glocalize GAFE for the specific exigencies and constraints of a given course and institution. The need to introduce explicitly the concept and practice of glocalization in classrooms has emerged as global political and economic systems seek engaged citizens and glocal-aware employees who can understand and manage the flows among and between local and global networks and who can share ideas and information with others through the educational efforts of governments, multinational corporations, and non-governmental organizations (NGOs). (See Spring, 2008; Brooks & Normore, 2010; and Rice & Lauren, 2014, for thorough and ongoing discussions of the value and importance of glocalized educational theory and practice.)

Table 15.2 represents questions that institutions, faculty, and students may address as they consider entering the glocalized “space of flows” of a cloud-based composing platform like GAFE, where students and instructors join an intercultural community of writers who, with appropriate permissions, create a shared audience that flows across time and place. In the space of flows, as Castells (2010) notes, information and identity continually flow between the local and global without being entirely encompassed in either space. As institutions consider implementing GAFE, they create opportunities and limitations that apply to local and global concerns. Local concerns relate to ways the tool gets installed, managed, and used at the institution, while global concerns relate to the way the institution—and the individual—relates to Google as a corporate entity.

As faculty consider implementing GAFE in the classroom, they must address questions of local resources for access and training in using the software suite, as well as for curriculum development, course learning objectives, and assessment. They also face global questions of research and development to stay abreast of software updates, terms of service, and ownership of intellectual property. As students complete classes where GAFE is integrated, they face local issues like access to physical technology and Internet connectivity, universal design, and familiarity with the composing interface and collaborative tools. Students also face

Table 15.2. Heuristic for Implementing Google Drive for Collaborative Composing.

<i>Level</i>	<i>Local Concerns</i>	<i>Global Concerns</i>
Institution	<ul style="list-style-type: none"> <li>• Does your institution have Google Apps for Education installed?</li> <li>• Are there any restrictions or limits to the way Google Apps for Education will apply to your students?</li> <li>• Who is responsible for the local institutional contract with Google, and what access do you have to this individual or office?</li> <li>• Can you schedule classes in a networked computer classroom or lab?</li> <li>• What are the hours of your Academic Computing Centers and Libraries, for students without computers or reliable Internet access?</li> </ul>	<ul style="list-style-type: none"> <li>• What are the short-term and long-term contractual ownership guidelines for student and instructor data?</li> <li>• What terms of service and privacy policies apply to you and your students, and who is responsible for keeping tabs on changes to those policies?</li> <li>• How will you and your institutional contacts adapt or adopt unexpected and inevitable changes in Google Drive applications and terms of service (TOS)?</li> </ul>
Faculty	<ul style="list-style-type: none"> <li>• How familiar are you with Google Drive?</li> <li>• What resources are available to provide training in the effective use of Google Drive in composition?</li> <li>• How can you adapt and revise your current pedagogical practices to Google Drive?</li> <li>• How can you connect Google Drive as a technology to your learning outcomes and disciplinary practices?</li> <li>• Will you obtain (or are you required to obtain) written student permission to interact in Google Drive?</li> </ul>	<ul style="list-style-type: none"> <li>• How can you implement online writing instruction (OWI) Principles and the Council of Writing Program Administrators (CWPA) Framework for Post-Secondary Education?</li> <li>• What national or international resources can you tap for advice on how to implement Google Drive for collaborative composing?</li> <li>• What Google Apps and third-party plug-ins will you use with your students?</li> <li>• What Google resources can you use to better understand Google's privacy and profiling practices?</li> </ul>
Student	<ul style="list-style-type: none"> <li>• How familiar are your students with Google Drive? What training will you need to provide?</li> <li>• Do your students have access to high-speed Internet outside of F2F classes?</li> <li>• How will you construct and manage deadlines and deliverables?</li> <li>• What will you and your students consider "draft" and "final" products for assessment purposes?</li> <li>• How will you conduct peer review in the collaborative environment?</li> <li>• How will your students submit assignments for grading?</li> </ul>	<ul style="list-style-type: none"> <li>• Are there other students in other institutions composing in Google Drive? Can your students partner with them as resources?</li> <li>• How long will your students have access to their work? What arrangements are made for access after graduation?</li> <li>• When Google changes interfaces or relocates functions, how will you and your students collaborate to remediate?</li> <li>• Is there a plug-in available for Google Drive in the learning management system (LMS)?</li> </ul>

global questions of privacy and connectivity, especially to fellow students and collaborators beyond their political, social, and economic borders.

Despite the visual distinction of local and global concerns in the columnar display, the institutional, faculty, and student concerns always

exist at both local and global levels at the same time and in the same “real virtualities” (Castells, 2010, p. xxxi), with flow between them. The additional issues raised by the questions in Table 15.2 deserve thorough attention beyond the scope of the chapter. These align in categories of local technical implementation and ongoing support, local intellectual property (IP) rights within globalized cloud storage, accessibility to students and teachers of differing abilities and socioeconomic status, privacy concerns at both local and global levels, and digital asset ownership in cloud-based (rather than locally installed) online learning environments.

Because identities are related to and influenced by technologies (Selfe & Selfe, 1994; Reid, 2008), joining a local network of writers based in the class environment through the global network of Google collaborative composing necessarily influences the identities of class participants and aspects of the class experience. For example, class activities like peer review become student-centered and focused; rather than instructors setting times and dates for peer review, all class participants including the instructor can engage in peer review activities with class members at any stage of the composing process. Deliberately using the collaborative affordances of GAFE for pedagogical goals creates an iterative and participatory composing process that changes the role of instructor, peer reviewer, and writer, as each can simultaneously act as reviewer, writer, and even peer review facilitator. Table 15.3 delineates concepts changed or questioned through using GAFE in the classroom.

Glocalized entities blur their own identities, seen in the close parallels among institution, faculty, and student descriptions throughout Table 15.3. For example, it’s never entirely accurate to say that any single entity “owns” a composed artifact. The institution develops account creation procedures locally and implements those procedures in GAFE, and faculty and students use institutionally generated accounts to access GAFE and their content. Google then stores all artifacts in the digital cloud on its physical and virtual servers; faculty and students use institutional and/or personal Google accounts for sharing their work with others of their choosing. Institutional managers, in turn, have access to all accounts and the content created using those accounts, but do not have access to content that is shared by non-institutional account holders with institutional accounts. Finally, Google engineers and administrators have access to everything, but can use the content for narrowly defined purposes set forth in Google’s contract and terms of service (“Google apps,” n.d.). Thus, glocalization of cloud-based technology co-opts traditional understandings of individuality and privacy and replaces them with networked individualism (see “Google privacy,” 2014). Traditional

Table 15.3. Illustration of Glocalized Processes and Entities.

<i>Glocalized Processes (vertical) &amp; Entities (horizontal)</i>	<i>Institution</i>	<i>Faculty</i>	<i>Student</i>
Communication	Installing GAFE integrates communication media and local artifacts into Google networks.	Faculty communication artifacts join student artifacts in Google's network.	Student communication artifacts join other's artifacts in Google's network.
LMS (proprietary software)	Functionality of GAFE may call into question cost-benefit analysis of locally installed LMS.	Maintaining accounts in LMS and GAFE may call into question the need for both in an institutional system or require interaction across systems.	Student frustration with lack of real-time collaborative affordances in LMS or redundancy in dual interfaces may result in questioning value.
Ownership	Institution retains ownership of local work in individual accounts, but stores all work in cloud-based data centers; requires Google's cooperation and intervention to access.	Intellectual property from faculty labor becomes individually owned only through institutional GAFE interface.	Student work represents individual effort, social collaboration among students, and instructor feedback, stored in institutionally defined virtual "place."
Hardware	Optimal implementation of GAFE in F2F classes may require scheduling classes in networked computer classroom with Internet-connected computers.	Faculty computing hardware may require minimal locally installed software. Faculty "office hours" and availability may change as a result of 24/7, multi-device ubiquity.	Student computing hardware requires only an Internet connection and modern web browser or smartphone/tablet app for connecting to the GAFE network.
Training	Individual specialists for training students and faculty in various software titles are not required; instead, institutions can put in place GAFE super-users who carefully follow changes and updates and introduce faculty to Google support sites and GAFE user groups for additional support.	Faculty must become continual learners, regularly updating their skills in GAFE application as they are added and updated at Google's convenience.	Students require training in composing and collaborative affordances. Teachers must teach students the interface they expect them to use, including file naming and folder organization; these skills become useful for other classes and contexts.

*continued on next page*

Table 15.3—*continued*

<i>Glocalized Processes (vertical) &amp; Entities (horizontal)</i>	<i>Institution</i>	<i>Faculty</i>	<i>Student</i>
Intellectual Property	Institution’s locally established GAFE accounts become sole conduit for faculty and student access to their IP.	Faculty may decide to create and use personal Google account(s) for maintaining personal conduits to IP.	Students required to copy all IP to local or personal cloud-based storage to retain rights to IP beyond time as student, or must maintain an institutional account by continually taking classes.
Composing	Integration of GAFE provides a single platform for composing communications independently or collaboratively across offices, departments, populations, and schools.	Teachers engage in students’ collaborative composing experiences, providing feedback visible to all class members and modeling reviewing, revising, and commenting functions as a collaborator.	Students compose collaboratively within their own classes and beyond, enabling shared content across political and social boundaries.

institutional policies and procedures related to technology and activities (see Table 15.3) might therefore be unsuitable to authorize access or mediate conflicts when glocalized entities encounter legal agreements and policy statements like FERPA and HIPAA.

Using GAFE as a pedagogical tool combines the local classroom and the global Googleverse to form a glocalized composing community, but this implementation represents a limited networked community. With adequate planning, training, and collaborative pedagogy, we envision and recommend that FYC teachers consider implementing GAFE to create layered glocal networks between the classroom and Googleverse. For example, a writing program administrator (WPA) and instructor might connect multiple course sections with the same teacher at the same institution so students could collaborate across class section boundaries. The WPA and several different teachers at the same institution could connect multiple course sections so students in the same class taught by different instructors could collaborate across instructional and class boundaries. The WPA, department chair or division administrators, and teachers across multiple disciplines in an institution could connect sections of different departments’ courses to enable students to cross internal departmental, disciplinary, and divisional borders. Or multiple instructors and/

or WPAs in different institutions could connect classes across boundaries such as institution type or locations, or seek to connect course sections across state, provincial, or national borders, across languages, across levels in schools, and across socioeconomic and political boundaries.

Such boundary-crossing implementations would offer even more layers of glocalized networking to the class experience, benefitting students and teachers alike in their collaborative work through broadened horizons, empathetic responses, and valuable networking connections. Creating layered glocal networks responds to Cargile Cook's (2002) call for "layered literacies" and prepares students for success in current and future writing situations by providing them experiences with "a repertoire of complex and interrelated skills" (p. 7). Our more limited implementation has helped us uncover these broader, multiple-layered networking capabilities that using GAFE enables. As a result, heuristics offered in the chapter also apply to these larger networks available within the Googleverse's supra-network.

## CONCLUSION

Global networks operate from locally situated nodes in the network (Castells, 2010, p. xxxv), and the composition class, comprised of students and the faculty member, represents that node. As a node on the global network situated in a local space, composition classes and their content, including argumentation, research, persuasion, expression, and rhetoric, will include and necessarily reflect increasingly glocal thinking. Incorporating GAFE in the classroom places the instructor (as glocalizer) at the intersection of the local and the global: the instructor is the node that connects the horizontal network of the local composing class with the vertical network of the global entity, Google.

Castells (2010) considers this intersection a space of contradiction. The faculty member participates in the composing community through a flattened hierarchy; students often have the same permissions and access to comment and view as the instructor. The faculty member is admitted to—and indeed is responsible for initially creating—the community of trust among the learners. Yet faculty also must enforce the dominant protocols of the course, institution, and society, and they are in the powerful position of assessment. Instructors can be complicit with Castells's vertical network of power, unless they consider the rhetoricity of the technology tool itself, as DePew (2015) suggests. It's also a space of great potential; Castells considers this intersection a key feature of the network society in which networked connectivity works between and among the



local and the global. Faculty occupy a unique role that enables them to facilitate awareness of and movement through the two networked worlds, modeling and promoting critical use that empowers participants.

In separate institutional settings, we used Google Drive as the primary composing and collaborating technology for a student-centered learning experience. While the use of Google Drive as a widely available technology is global, its implementation and use, both institutionally and pedagogically, are shaped by local conditions. The heuristics discussed in the chapter demonstrate the faculty's role as this critical network node, as the glocalizer, and guide others in building their own glocalized GAFE networking learning community. They also reveal multiple avenues for further research. Such avenues include the following topics or areas:

- *Issues of transfer:* As a free, available technology, GAFE allows students to develop and hone composing, knowledge management, and workflow processes that can be replicated in other academic, personal, and professional settings. Further research is needed into the extent students' experience composing collaboratively in GAFE influences their future composing decisions and practices, particularly within the disciplines.
- *Ethics, Complicities, and Critical Awareness:* GAFE is offered free to educational institutions, but is a paid product for businesses. Thus, introducing GAFE to students does build a familiarity and affinity with the product. Composition instructors must therefore be aware of the implications of using software provided by a for-profit company whose business model requires data mining and sale of information. They should also seek to foster the critical awareness of technology's hidden ideologies in their students. More research into modifying pedagogical practices to promote this critical awareness is needed.
- *Assessment:* GAFE affords the ability to follow students' composing processes and calls into question the concepts of "draft" and "final." The iterative and archived writing in GAFE creates the opportunity to privilege process over product, which has pedagogical implications for FYC and beyond. It also is an intriguing space for electronic portfolios and capstone projects. Developing strategies and rubrics for assessing process and progress in an online collaborative composing environment is an important avenue for further study.
- *Institutional Collaboration:* Implementing a global technology requires the collaborative, cooperative efforts of multiple campus departments, creating tensions that can be productive (Neff & Whithaus, 2008). These constituencies need agency in local decisions regarding global products. GAFE's flexible and glocalized implementations offer a way to productively encourage cooperation while maintaining individual preferences and needs. Furthermore, GAFE offers the ability

to collaborate *across* and *between* institutions. Opening the composing process to a global, multi-cultural context thus has implications for blending localized norms about writing and world Englishes and opens new areas for related research.

- *Authorship, Agency, and Plagiarism:* Because of the ability to compose simultaneously in GAFE, notions of a single author become complicated. Traditional composition teachers in traditional composition classrooms are invested in the idea of individual students producing single-authored artifacts to assess. If the text isn't composed by a single student writing in a non-networked composition classroom for a single authority figure, we face the prospect of having to rethink the concepts of "author," "owner," "artifact," and "plagiarism." Activity theories complicate agency further by including non-human agents in networked activity (Latour, 2005). The involvement of non-human agents in collaborative composing practice makes assigning credit for aspects of assignments difficult. Furthermore, opening a composing space to collaborative authorship creates the possibility of data manipulation and vulnerability (Chu et al., 2013), even so far as creating "fake collaboratively written documents on collaborative writing platforms" (Lee & Tsai, 2014).

When we compose in digital spaces, our identities and our agency are bound in visible and unseen ways to a network of networks. This entangled position as a node within local networks of students, within a networked institution, within the global network of the Googleverse, can seem alienating and disenfranchising, despite the ability of digital technologies to connect and empower. Yet Wellman et al. (2003) notice that "large institutions have neither destroyed nor withered communal relations."

The collaborative practices enabled by binding composition to the Googleverse also create a glocal community of learners that provides a space of trust, camaraderie, and shared learning that crosses local boundaries in the space of flows. Students not only were networked together through the composition class, they also became a group united via large-scale globalized tool "in response to the pressures, opportunities and constraints of large-scale forces" (Wellman et al., 2003) arising from the confluence of glocal networks in which they were situated. In addition, the community or "support network," bound together by the exigences of the course, creates a buffer against other large-scale forces. Students composing and collaborating in GAFE enact a local community that "provide[s] mutual aid, provide[s] partial identity and a sense of belonging" (Wellman et al., 2003). Binding to the glocal Googleverse also binds students to each other and to replicable, applicable, relevant composing and work processes, benefitting them with ways to navigate networked society as citizens, consumers, and community members.

## Note

1. During the process of publishing this chapter, Google rebranded Google Apps for Education (GAPE) as “G Suite for Education.” Rather than revising all mentions to match the rebranded identity, we retain the original GAPE throughout to illustrate the point made in Table 15.2 about corporate rebranding as it relates to institutional (and publishing) policies and decisions. We also retain the name of the product as we used it to accurately reflect our use of the tools.

## References

- Alexander, J. (2009). Gaming, student literacies, and the composition classroom: Some possibilities for transformation. *College Composition and Communication*, 61(1), 35–63.
- Appadurai, A. (1990). Disjuncture and difference in the global cultural economy. *Theory, Culture & Society*, 7(2), 295–310. <https://doi.org/10.1177/026327690007002017>
- Bazerman, C. (1994). Systems of genre and the enactment of social intentions. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79–104). London, England: Taylor & Francis.
- Bazerman, C. (2004). Speech acts, genres, and activity systems: How texts organize activities and people. In C. Bazerman & P. Prior (Eds.), *What writing does and how it does it: An introduction to analyzing texts and textual practices* (pp. 309–340). New York, NY: Routledge.
- Bazerman, C. (2013). *A rhetoric of literate action* (Vol. 1). Anderson, SC: Parlor Press. Retrieved from <https://wac.colostate.edu/books/literateaction/v1>
- Bezemer, J., & Kress, G. (2008). Writing in multimodal texts: A social semiotic account of designs for learning. *Written Communication*, 25(2), 166–195. <https://doi.org/10.1177/0741088307313177>
- Bolter, J. D., & Grusin, R. A. (1996). Remediation. *Configurations*, 4(3), 311–358. <https://doi.org/10.1353/con.1996.0018>
- boyd, d. (2007). Why youth (heart) social network sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 119–142). Cambridge, MA: The MIT Press.
- Bridwell-Bowles, L., Powell, K. E., & Choplin, T. W. (2009). Not just words any more: Multimodal communication across the curriculum. *Across the Disciplines*, 6. Retrieved from <https://wac.colostate.edu/atd/technologies/bridwellbowlesetal.cfm>
- Brooks, J. S., & Normore, A. H. (2010). Educational leadership and globalization: Literacy for a global perspective. *Educational Policy*, 24(1), 52–82. <https://doi.org/10.1177/0895904809354070>
- Cargile Cook, K. (2002). Layered literacies: A theoretical frame for technical communication pedagogy. *Technical Communication Quarterly*, 11(1), 5–29. [https://doi.org/10.1207/s15427625tcq1101\\_1](https://doi.org/10.1207/s15427625tcq1101_1)
- Castells, M. (2010). *The rise of the network society* (2<sup>nd</sup> ed., vol. 1). Oxford, England: Wiley-Blackwell.
- Chu, C.-K., Zhu, W.-T., Han, J., Liu, J. K., Xu, J., & Zhou, J. (2013). Security concerns in popular cloud storage services. *IEEE Pervasive Computing*, 12(4), 50–57. <https://doi.org/10.1109/MPRV.2013.72>
- Council of WPA. (2014, July 17). *WPA outcomes statement for first-year composition*. <http://wpacouncil.org/positions/outcomes.html>
- DePew, K. E. (2015). Preparing for the rhetoricity of OWI. In B. L. Hewett & K. E. DePew (Eds.), *Foundational practices of online writing instruction* (pp. 439–467). Anderson, SC: Parlor Press. <https://wac.colostate.edu/books/owi>

- Feenberg, A. (1991). *Critical theory of technology*. Oxford, England: Oxford University Press
- Gaillet, L. L. (2009). A socially constructed view of reading and writing: Historical alternatives to 'bridging the gap'. In L. Ostergaard, J. Ludwig, & J. Nugent (Eds.), *Transforming English studies: New voices in an emerging genre* (pp. 163–178). Anderson, SC: Parlor Press.
- Garrison, D. R., & Vaughan, N. D. (2007). *Blended learning in higher education: Framework, principles, and guidelines*. San Francisco, CA: Jossey-Bass. <https://doi.org/10.1002/9781118269558>
- Google apps terms of service—Google apps. (n.d.). Retrieved from [https://www.google.com/apps/intl/en/terms/education\\_terms.html](https://www.google.com/apps/intl/en/terms/education_terms.html)
- Google privacy policy—Google privacy and terms. (2014). Retrieved from <http://www.google.com/intl/en/policies/privacy>
- Hall, S. (2007). Encoding, decoding. In S. During (Ed.), *The cultural studies reader* (3<sup>rd</sup> ed., pp. 33–44). London, England: Routledge. (Original work published 1973.)
- Johnson-Eilola, J. (1998). Negative spaces: From production to connection in composition. In M. Sidler, R. Morris, & E. Smith (Eds.), *Computers in the composition classroom* (pp. 454–468). Boston, MA: Bedford/St. Martin's.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford, England: Oxford University Press.
- Lee, Y., & Tsai, W. (2014). A new data hiding method via revision history records on collaborative writing platforms. *ACM Transactions on Multimedia Computing Communications and Applications*, 10(2), 1–21. <https://doi.org/10.1145/2534408>
- Miller, C. R. (1984). Genre as social action. *Quarterly Journal of Speech*, 70(2), 151–167. <https://doi.org/10.1080/00335638409383686>
- Miller, C. R. (1994). Rhetorical community: The cultural basis of genre. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 67–78). London, England: Taylor & Francis.
- Neff, J. M., & Whithaus, C. (2008). *Writing across distances and disciplines: Research and pedagogy in distributed learning*. New York, NY: Lawrence Erlbaum.
- Reid, A. (2008). Portable composition: iTunes university and networked pedagogies. *Computers and Composition*, 25(1), 61–78. <https://doi.org/10.1016/j.compcom.2007.09.003>
- Rice, J. (2006). Networks and new media. *College English*, 69(2), 127–133. <https://doi.org/10.2307/25472197>
- Rice, R., & Lauren, B. (2014). Developing intercultural competence through glocal activity theory using the connect-exchange study abroad app. In G. Verhulsdonck & M. Limbu (Eds.), *Digital rhetoric and global literacies: Communication modes and digital practices in the networked world* (pp. 154–173). Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-4666-4916-3.ch008>
- Robertson, R. (1995). Glocalization: Time-space and homogeneity-heterogeneity. In M. Featherstone, S. Lash, & R. Robertson (Eds.), *Global modernities* (pp. 25–44). London, England: Sage. <https://doi.org/10.4135/9781446250563.n2>
- Selber, S. A. (2004). *Multiliteracies for a digital age*. Carbondale, IL: Southern Illinois University Press.
- Selfe, C. L., & Selfe, R. J. (1994). The politics of the interface: Power and its exercise in electronic contact zones. *College Composition and Communication*, 45(4), 480–504. <https://doi.org/10.2307/358761>
- Smith, C. C. (2008). Technologies for transcending a focus on error: Blogs and democratic aspirations in first-year composition. *Journal of Basic Writing*, 27(1), 35–60.
- Spring, J. (2008). Research on Globalization and Education. *Review of Educational Research*, 78(2), 330–363. <https://doi.org/10.3102/0034654308317846>
- Vaidhyanathan, S. (2008, September 19). Generational myth. *The Chronicle of Higher*

- Education*, B7. Retrieved from <https://www.chronicle.com/article/Generational-Myth/32491>
- Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Díaz, I., & Miyata, K. (2003). The social affordances of the Internet for networked individualism. *Journal of Computer-Mediated Communication*, 8(3). <https://doi.org/10.1111/j.1083-6101.2003.tb00216.x>
- Yancey, K. B. (2004). Made Not Only in Words: Composition in a New Key. *College Composition and Communication*, 56(2), 297–328. <https://doi.org/10.2307/4140651>