

# College Reading and Studying: The Complexity of Academic Literacy Task Demands

1 Jodi Patrick Holschuh

2 XX

It seems that every generation, at some point, discovers that students cannot read as well as they would like or as well as professors expect. (Maxwell, 1979, p. 269)

Several years ago, I embarked on a research study investigating the academic literacy demands in college. This research was undertaken as a result of my experiences in teaching developmental education courses, as I wanted to better understand what was being asked of students in their college courses. I enrolled in a full-time load of undergraduate courses, which were selected to provide experiences with a broad scope of disciplines and literacy tasks. I attended classes, read, discussed, wrote, studied, and took exams. In short, I completed all of the tasks assigned to students. In Spanish, I drew my dream house and then clumsily described it to a classmate using the Spanish vocabulary from that week's lessons. In economics, I manipulated real-world data in an online learning system to understand the concepts of equilibrium, consumer surplus, and producer surplus. In political science, I watched and analyzed episodes of *The West Wing*, and in geology, I memorized a variety of rock types and formations and then went on a campus scavenger hunt to find examples of them (Holschuh, 2013).

I found that there was no once-size-fits-all expectation for the depth or degree to which I was expected to understand the information. There was no single strategy that could aid in my completion of course tasks. There were, however, a myriad of literacy tasks that students were expected to be able to engage in. This is not surprising, and it helps illuminate the complexity of academic literacy task demands at the college level. In this commentary, I discuss the academic literacy demands in college by examining some of the reasons why it is difficult to fully prepare students and several

ways educators can help them on the path toward college readiness.

## Academic Literacy

With all of the attention being paid to college readiness and especially academic literacy, it is reasonable to wonder why so many students arrive in college underprepared for the rigors of the literacy demands. From the first day of my undergraduate semester, I was struck by the multitude of tasks and of decisions that needed to be made that would impact the ways I approached the literacy tasks. Some of my decisions included buying the economics textbook even though it was not required, deciding to take notes on my own even when the professor provided them, and deciding to read the text before class in political science and Spanish but waiting until after the lecture in economics and geography. These are just a few examples of the many decisions that all students must make; however, once students start along a studying path, many find it difficult to make changes (Holschuh & Aultman, 2009).

To better grasp what is included in the expectations for college academic literacy, it is helpful to understand a general definition of academic task. Doyle (1983) defined *academic task* as

attention on three aspects of students' work: (a) the products students are to formulate, such as an original essay or

JODI PATRICK HOLSCHUH is the chair of and a professor in the Department of Curriculum and Instruction at Texas State University, San Marcos, USA; email holschuh@txstate.edu.

answers to a set of test questions; (b) the operations that are to be used to generate the product, such as memorizing a list of words or classifying examples of a concept; and (c) the “givens” or resources available to students while they are generating a product, such as a model of a finished essay supplied by the teacher or a fellow student. Academic tasks, in other words, are defined by the answers students are required to produce and the routes that can be used to obtain these answers. (p. 161)

Research has estimated that over 80% of college-level tasks involve reading. Thus, it is important to examine the academic literacy task demands of college in addition to general academic tasks (Nist & Simpson, 2000).

Academic literacy tasks are the subset of all academic tasks that involve reading and writing and are rooted within larger cultural practices. Yancey (2009) defined *academic literacy* as the ability to (a) write for different purposes, audiences, and occasions; (b) access, interpret, and evaluate information; (c) think critically; (d) reflect one’s performance; and (e) create new texts and new knowledge. These tasks are typically multidimensional, developmental, and goal focused (Alexander, 2012). Academic literacy is more than a series of skills; it is a social practice that involves both the reader and the larger community context and occurs as a result of a contextualized learning environment (Gee, 2015; Holschuh & Paulson, 2013; Porter, 2018). Because there are so many aspects involved in academic literacy at the postsecondary level, Stahl and Armstrong (2018) suggested that college reading might be more accurately described as “college literacy, reading, learning, and study strategies instruction and student support” (p. 48).

New standards for college readiness seek to engage learners in increasingly higher levels of academic reading skills before college (National Center for Education Statistics, 2016). The goal is to help students gain the academic knowledge and skills to be ready for college-level work (Achieve, 2011; Conley, 2014). However, the National Center for Education Statistics reported that only 37% of 12th-grade students are proficient-level readers. Other research has estimated that 75% of community college students and more than 50% of four-year college students are unprepared to meet the literacy demands of college (ACT, 2013; American Institutes for Research, 2006). These struggles are not due to a lack of basic skills alone (Greenleaf, Schoenbach, Cziko, & Mueller, 2001).

### **The Difficulty of Preparing Students for Academic Literacy Demands**

It has been well documented in the literature that college students often struggle with academic literacy

demands. There is evidence of reading assistance college classes dating back before the 1900s (Stahl & King, 2009). Most college students in the 19th century had trouble with basic reading, spelling, writing, and studying demands, which led to the development of preparatory programs (Wyatt, 1992). The reasons why students are underprepared are complex and varied, with some studies suggesting that it may be due to an increase in text complexity (RAND Reading Study Group, 2002), greater discipline-specific literacy demands (Greenleaf et al., 2001; Shanahan & Shanahan, 2012), and unfamiliar sociocultural contexts (Gee, 2015), to name but a few.

Because many students struggle with the academic literacy expectations in their courses, some college faculty “have adopted a culture of work-arounds that deliver content while avoiding their responsibility to promote, integrate, and instruct either content reading techniques or disciplinary literacy practices in their respective classes” (Stahl & Armstrong, 2018, p. 58). This approach may extend student struggles with literacy demands to postbaccalaureate programs, with some research noting that incoming law students have difficulty engaging in careful reading, have had limited practice in reading complex text and lengthy text, and although they read more than the national average, typically experience difficulty with academic literacy demands in their first year of law school (Gallacher, 2007; Montana, 2017).

**Familiar yet Different.** Many students find that the literacy demands that are expected in college differ from those that they experienced in high school (Yancey, 2009). Although the tasks may appear similar, as students have experience in writing papers, reading textbooks, and discussing readings with peers, the postsecondary literacy expectations are more varied and complex. Yancey described these differences as a parallel universe with diverse reading and writing expectations from previous experiences. Additionally, the literacy demands vary greatly from institution to institution and even from professor to professor, which makes it difficult to quantify exactly what the expectations will be for students (Henry & Stahl, 2017; Yancey, 2009). Thus, the literacy demands that students experience may vary greatly from national or local college readiness standards.

**Expected Reading Proficiency.** ACT (2006) stated that “the clearest differentiator in reading between students who are college ready and students who are not is the ability to comprehend *complex* texts” (p. 2). Students do not need to be experts to be ready for college-level work,

but they need to be proficient in reading skills such as independent reading, close/careful reading, reading across texts, and stamina for reading longer pieces (Springer, Wilson, & Dole, 2014). They also need well-developed fluency in reading in terms of word recognition accuracy and automaticity (Rasinski et al., 2017).

To be able to use these reading skills, students need to have an understanding of what they are being asked to do for any given task, and they need to possess a repertoire of literacy strategies (Nist & Simpson, 2000). However, many students who were proficient readers in high school experience difficulty with academic literacy tasks in college. There are a variety of reasons why this difficulty may occur. It may be because they need more advanced reading strategies for the types of texts that they encounter in college, or it may be due to the varied nature and sources of text (Holschuh & Aultman, 2009). Students are often asked to read from multiple sources in college, which may cause students to struggle when asked to think across texts (Shanahan & Shanahan, 2012). Or, students may have a misunderstanding or underestimation of the reading and writing tasks required in a particular discipline, which may lead them to misjudge the depth of thinking required (Shanahan & Shanahan, 2008).

**Discipline Specific.** Disciplinary literacy focuses on teaching the knowledge, abilities, and unique tools that people within a discipline use to participate in the discipline (Shanahan & Shanahan, 2012). There is a growing body of evidence suggesting that knowledge of discipline-specific strategies can prepare students to meet college academic literacy demands by illuminating important cultural practices of college (Moje, 2007). In fact, for many students, learning the ways to navigate across disciplines can serve as an important link for entering students between in-school and out-of-school knowledge (Moje, 2007). To prepare students for college academic literacy demands, some high schools have implemented reading courses for struggling students that focus on general literacy and vocabulary strategies (Lee & Spratley, 2010). However, this may leave students underprepared to face the discipline-specific literacy skills that college students are expected to possess (Shanahan & Shanahan, 2008). Lee (2004) suggested using students' real-world language and experiences to scaffold disciplinary learning.

**Metacognitive Influences.** Metacognitive awareness of when to use a particular reading or study strategy is commonly included in reading instruction, and in fact, students who exhibit this type of awareness define what

it means to be an effective reader (Armstrong & Lampi, 2017). However, many students experience a disconnect between their perceived ability and their academic performance. For example, despite mean raw scores of below the 50th percentile on a reading comprehension test, Hooley and Thorpe (2017) found that 92% of students believed that they understood what they were reading most of the time and that 85% felt that they were careful readers most of the time. Other research found discrepancies between the reading strategies that students reported using and those captured with eye tracker data (Holschuh, Paulson, Lampi, Hernandez, & Ramirez, 2014). These incongruities in metacognitive awareness may be tied to the ability to use metacognitive reading processes, which allow readers to detect contradictions or inconsistencies in text, select important information, and employ strategies depending on the text and the discipline (Alexander, 2005; Pintrich, 2002).

### ***Helping Students Prepare for College Academic Literacy Tasks***

In a discussion a few days before my undergraduate semester, the geography professor expressed his frustration about students' readiness for his class: "They don't even know where Wisconsin is! I give them the notes, a study guide, a test review, and I think this will be the semester where everyone gets an A." He was sure that providing more and more supports was the way to help students succeed, but not surprisingly, these added supports did not ensure success for all, as evidenced by student grades at the end of the semester. Although there are many reasons why preparing students for academic literacy tasks is difficult, there are some ways that secondary and college educators can help.

**Build a Repertoire of Generative Strategies.** Secondary and college educators can teach strategies that help students with college-level literacy tasks. Because reading is a multidimensional, complex process (Alexander, 2012), these strategies will need to do more than develop one skill at a time. Readers need to know what strategies they are employing, why they are using a particular strategy, and under which conditions the strategy should be employed (Armstrong & Lampi, 2017; Paris, Lipson, & Wixson, 1983). Reading in college is usually a solitary activity (Nist & Simpson, 2000), so students need to learn generative strategies that they can use independently (Holschuh & Aultman, 2009; Nist & Simpson, 2002). However, knowing strategies, even the most effective ones, is not enough. Unless students

can move beyond teacher dependence and apply strategies on their own, they will have a difficult time being prepared for the academic literacy demands in college.

**Build Independence.** Educators can use strategies for fostering independent reading and learning, including peer collaboration, providing ample time for learning, and allowing students to grapple with text (Hynd-Shanahan, 2013). Scaffolding student learning while providing students with the independence they need is a careful balancing act. Sometimes students are given too much scaffolding to prepare for a task. For example, if students are told what they are going to read or given questions to answer instead of guiding students to ask their own questions, students are left with little to discover as they read (Hynd-Shanahan, 2013). Before they enter college, students should be given ample opportunity to read, analyze, and interpret on their own using the strategies that they have learned. They should also be encouraged to modify strategies in such a way that they have ownership in the strategies.

**Build Experience With College-Level Text.** To better prepare them for college academic literacy demands, students need to understand the components that make text complex, such as text coherence, organization, disciplinary conventions, and sentence structure (Shanahan, Fisher, & Frey, 2012). This is best accomplished by teaching sophisticated, disciplinary strategies using authentic, complex disciplinary text (Holschuh, 2013). Instruction should begin with easier, shorter text; build complexity and length over time (Hynd-Shanahan, 2013); and include several genres of nonfiction text, which plays the largest role in the types of texts that students are expected to read (Yancey, 2009). Students also need experience in reading challenging text, which may be essential for developing literacy skills, as research has suggested that using easier texts with learners who struggle with reading can actually impede literacy development (Shanahan et al., 2012).

**Build Stamina.** Reading stamina is the ability to persevere in reading texts and is tied to maintaining motivation and persistence when reading challenging text (Shanahan et al., 2012). It is a skill that many readers need to develop from the earliest stages in reading (Trainin, Hiebert, & Wilson, 2015). However, providing easier readings is not the answer because it does not necessarily improve motivation for reading and will not lead to gains in reading skills. Building reading stamina is most effective when instructors are

open with students about the goal of building capacity for reading and comprehension strategies in tandem (Hynd-Shanahan, 2013). One way to increase stamina is to focus instruction on creating successive successes (Shanahan et al., 2012), where students apply what they have learned and engage in their own reading of text as they move toward independence. It is also important for readers to experience a context where struggling with text “is honored and a valued part of learning” (Hynd-Shanahan, 2013, p. 96). This experience has the potential to build capacity for reading with reduced frustration if it is explicitly taught as a routine part of the learning process. Additionally, the ability to stick with the task of reading is often improved when students understand the underlying mechanics of reading (Gulla, 2012).

**Understand the Underlying Processes of Reading and Learning.** Readers need to do much more than identify a main idea or detect an inference when they read. They also need to be able to do more than skim a text to glean basic facts. The most effective reading strategies have metacognitive, cognitive, and affective components and require purposeful effort to generate meaning by building relations between the text and what readers already know. Thus, readers are not passive participants; rather, they are intentionally organizing, isolating, and elaborating on key information (Holschuh & Aultman, 2009; Nist & Simpson, 2002). This will require a good deal of instruction, scaffolding, and practice with different disciplines both within and across genres of text (Holschuh & Aultman, 2009).

## Concluding Thoughts

Students need some scaffolded experience with the types of academic literacy tasks that they will experience before they enter college, and they will need continued support from educators once they matriculate at college. As discussed earlier, for many students, the tasks required in college seem familiar, but that can be misleading. For example, at the beginning of this commentary, I described several tasks that I experienced in my undergraduate semester that would seem familiar to most students. However, the tasks went beyond what is typically expected of students before they enter college. Rather than just watching a video, a task required analysis, interpretation, and comparison with political theories learned in class. Rather than being quizzed on a list of memorized geological terms, a task required application of that knowledge to be able to find examples on campus. To complete these tasks, students were expected to have a well-developed understanding of the

academic literacy expectations of each professor and in each context, which is essentially a new trial by fire every semester. In this commentary, I touched on several reasons why it is difficult to prepare students for all of the academic literacy demands that they may face; however, empowering students with independent, authentic experiences before college has the potential to help ease the transition for many learners.

## REFERENCES

- Achieve. (2011). *Closing the expectations gap 2011: Sixth annual 50-state progress report on the alignment of high school policies with the demands of college and careers*. Washington, DC: Author. Retrieved from <https://www.achieve.org/files/AchieveClosingtheExpectationsGap2011.pdf>
- ACT. (2006). *Reading between the lines: What the ACT reveals about college readiness in reading*. Iowa City, IA: Author. Retrieved from [https://www.act.org/content/dam/act/unsecured/documents/reading\\_summary.pdf](https://www.act.org/content/dam/act/unsecured/documents/reading_summary.pdf)
- ACT. (2013). *The condition of college and career readiness 2013*. Iowa City, IA: Author. Retrieved from <https://www.act.org/content/dam/act/unsecured/documents/CCCR13-NationalReadinessRpt.pdf>
- Alexander, P.A. (2005). The path to competence: A lifespan developmental perspective on reading. *Journal of Literacy Research*, 37(4), 413–436. [https://doi.org/10.1207/s15548430jlr3704\\_1](https://doi.org/10.1207/s15548430jlr3704_1)
- Alexander, P.A. (2012). Reading into the future: Competence for the 21st century. *Educational Psychologist*, 47(4), 259–280. <https://doi.org/10.1080/00461520.2012.722511>
- American Institutes for Research. (2006, January 19). *New study of the literacy of college students finds some are graduating with only basic skills* [Press release]. Retrieved from <https://www.air.org/news/press-release/new-study-literacy-college-students-finds-some-are-graduating-only-basic-skills>
- Armstrong, S.L., & Lampi, J.P. (2017). PILLAR: A reading strategy for a new era of strategy instruction at the college level. *Journal of College Literacy and Learning*, 43(3), 3–17.
- Bartholomae, D. (1985). Inventing the university. In M. Rose (Ed.), *When a writer can't write: Studies in writer's block and other composing-process problems* (pp. 134–165). New York, NY: Guilford.
- Doyle, W. (1983). Academic work. *Review of Educational Research*, 53(2), 159–199. <https://doi.org/10.3102/00346543053002159>
- Gallacher, I. (2007). “Who are those guys?”: The results of a survey studying the information literacy of incoming law students. *California Western Law Review*, 44(1), article 5. Retrieved from <https://scholarlycommons.law.cwsl.edu/cwlr/vol44/iss1/5>
- Gee, J.P. (2015). *Social linguistics and literacies: Ideology in discourses* (5th ed.). New York, NY: Routledge.
- Greenleaf, C., Schoenbach, R., Cziko, C., & Mueller, F. (2001). Apprenticing adolescent readers to academic literacy. *Harvard Educational Review*, 71(1), 79–130. <https://doi.org/10.17763/haer.71.1.q811712577334038>
- Gulla, A.N. (2012). Putting the “shop” in reading workshop: Building reading stamina in a ninth-grade literacy class in a Bronx vocational high school. *English Journal*, 101(5), 57–62.
- Henry, L.A., & Stahl, N.A. (2017). Dismantling the developmental education pipeline: Potent pedagogies and promising practices that address the college readiness gap. *Journal of Adolescent & Adult Literacy*, 60(6), 611–616. <https://doi.org/10.1002/jaal.640>
- Holschuh, J.P. (2013). Read and write like a college freshman: Trying to walk in their shoes. *English in Texas*, 43(1), 6–13.
- Holschuh, J.P., & Aultman, L. (2009). Comprehension development. In R.F. Flippo & D.C. Caverly (Eds.), *Handbook of college reading and study strategy research* (2nd ed., pp. 121–144). New York, NY: Routledge.
- Holschuh, J.P., & Paulson, E.J. (2013). *The terrain of college developmental reading*. Oak Creek, WI: College Reading & Learning Association. Retrieved from <http://207.250.94.50/images/whitepaper/TheTerrainofCollege91913.pdf>
- Holschuh, J.P., Paulson, E.J., Lampi, J., Hernandez, P., & Ramirez, Y. (2014, November). *I always read the sidebars: Research on students' perceived vs. actual strategy use*. Paper presented at the annual meeting of the College Reading & Learning Association, St. Paul, MN.
- Hooley, D.S., & Thorpe, J. (2017). The effects of formative reading assessments closely linked to classroom texts on high school reading comprehension. *Educational Technology Research and Development*, 65(5), 1215–1238. <https://doi.org/10.1007/s11423-017-9514-5>
- Hynd-Shanahan, C. (2013). What does it take? The challenge of disciplinary literacy. *Journal of Adolescent & Adult Literacy*, 57(2), 93–98. <https://doi.org/10.1002/JAAL.226>
- Lee, C.D. (2004). Literacy in the academic disciplines and the needs of adolescent struggling readers. *Voices in Urban Education*, 2004(3), 14–25.
- Lee, C.D., & Spratley, A. (2010). *Reading in the disciplines: The challenges of adolescent literacy*. New York: Carnegie Corporation of New York.
- Maxwell, M. (1979). *Improving student learning skills: A comprehensive guide to successful practices and programs for increasing the performance of underprepared students*. San Francisco, CA: Jossey-Bass.
- Moje, E.B. (2007). Developing socially just subject-matter instruction: A review of the literature on disciplinary literacy teaching. *Review of Research in Education*, 31(1), 1–44. <https://doi.org/10.3102/0091732X07300046001>
- Montana, P.G. (2017). Bridging the reading gap in the law school classroom. *Capital University Law Review*, 45(3), 433–455.
- National Center for Education Statistics. (2016). *The Nation's Report Card: 2015 mathematics and reading at grade 12*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from [https://www.nationsreportcard.gov/reading\\_math\\_g12\\_2015/](https://www.nationsreportcard.gov/reading_math_g12_2015/)
- Nist, S.L., & Simpson, M.L. (2000). College studying. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 645–666). Mahwah, NJ: Erlbaum.
- Nist, S.L., & Simpson, M.L. (2002). Developmental and college reading. In B.J. Guzzetti (Ed.), *Literacy in America: An encyclopedia of history, theory, and practice* (Vol. 1, pp. 127–131). Santa Barbara, CA: ABC-CLIO.
- Paris, S.G., Lipson, M.Y., & Wixson, K.K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology*, 8(3), 293–316. [https://doi.org/10.1016/0361-476X\(83\)90018-8](https://doi.org/10.1016/0361-476X(83)90018-8)
- Pintrich, P.R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory Into Practice*, 41(4), 219–225. [https://doi.org/10.1207/s15430421tip4104\\_3](https://doi.org/10.1207/s15430421tip4104_3)
- Porter, H.D. (2018). Constructing an understanding of undergraduate disciplinary reading: An analysis of contemporary

- scholarship. *Journal of College Reading and Learning*, 48(1), 25–46. <https://doi.org/10.1080/10790195.2017.1362970>
- RAND Reading Study Group. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: RAND.
- Rasinski, T.V., Chang, S.-C., Edmondson, E., Nageldinger, J., Nigh, J., Remark, L., ... Rupley, W.H. (2017). Reading fluency and college readiness. *Journal of Adolescent & Adult Literacy*, 60(4), 453–460. <https://doi.org/10.1002/jaal.559>
- Shanahan, T., Fisher, D., & Frey, N. (2012). The challenge of challenging text. *Educational Leadership*, 69(6), 58–62.
- Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, 78(1), 40–59. <https://doi.org/10.17763/haer.78.1.v62444321p602101>
- Shanahan, T., & Shanahan, C. (2012). What is disciplinary literacy and why does it matter? *Topics in Language Disorders*, 32(1), 7–18. <https://doi.org/10.1097/TLD.ob013e318244557a>
- Springer, S.E., Wilson, T.J., & Dole, J.A. (2014). Ready or not: Recognizing and preparing college-ready students. *Journal of Adolescent & Adult Literacy*, 58(4), 299–307. <https://doi.org/10.1002/jaal.363>
- Stahl, N.A., & Armstrong, S.L. (2018). Re-claiming, re-inventing, and re-reforming a field: The future of college reading. *Journal of College Reading and Learning*, 48(1), 47–66. <https://doi.org/10.1080/10790195.2017.1362969>
- Stahl, N.A., & King, J.R. (2009). A history of college reading. In R.F. Flippo & D.C. Caverly (Eds.), *Handbook of college reading and study strategy research* (2nd ed., pp. 3–25). New York, NY: Routledge.
- Trainin, G., Hiebert, E.H., & Wilson, K.M. (2015). A comparison of reading rates, comprehension, and stamina in oral and silent reading of fourth-grade students. *Reading Psychology*, 36(7), 595–626. <https://doi.org/10.1080/02702711.2014.966183>
- Wyatt, M. (1992). The past, present, and future need for college reading courses in the U.S. *Journal of Reading*, 36(1), 10–20.
- Yancey, K.B. (2009). The literacy demands of entering the university. In L. Christenbury, R. Bomer, & P. Smagorinsky (Eds.), *Handbook of adolescent literacy research* (pp. 256–270). New York, NY: Guilford.

# MARKED PROOF

## Please correct and return this set

Please use the proof correction marks shown below for all alterations and corrections. If you wish to return your proof by fax you should ensure that all amendments are written clearly in dark ink and are made well within the page margins.

<i>Instruction to printer</i>	<i>Textual mark</i>	<i>Marginal mark</i>
Leave unchanged	... under matter to remain	Ⓟ
Insert in text the matter indicated in the margin	∧	New matter followed by ∧ or ∧ <sup>Ⓢ</sup>
Delete	/ through single character, rule or underline or ┌───┐ through all characters to be deleted	Ⓞ or Ⓞ <sup>Ⓢ</sup>
Substitute character or substitute part of one or more word(s)	/ through letter or ┌───┐ through characters	new character / or new characters /
Change to italics	— under matter to be changed	↙
Change to capitals	≡ under matter to be changed	≡
Change to small capitals	≡ under matter to be changed	≡
Change to bold type	~ under matter to be changed	~
Change to bold italic	≈ under matter to be changed	≈
Change to lower case	Encircle matter to be changed	≡
Change italic to upright type	(As above)	⊕
Change bold to non-bold type	(As above)	⊖
Insert 'superior' character	/ through character or ∧ where required	Υ or Υ under character e.g. Υ or Υ
Insert 'inferior' character	(As above)	∧ over character e.g. ∧
Insert full stop	(As above)	⊙
Insert comma	(As above)	,
Insert single quotation marks	(As above)	Ƴ or ƴ and/or ƶ or Ʒ
Insert double quotation marks	(As above)	ƶ or Ʒ and/or Ʒ or ƶ
Insert hyphen	(As above)	⊥
Start new paragraph	┌	┌
No new paragraph	┐	┐
Transpose	└┐	└┐
Close up	linking ○ characters	Ⓞ
Insert or substitute space between characters or words	/ through character or ∧ where required	Υ
Reduce space between characters or words		↑