
Learning theorist Kenneth Bruffee traces the roots of collaborative learning in American college classrooms back to the early 1970s when changing educational needs necessitated adapting conventional college classroom practices to the needs of new students. Traditional pedagogy had failed because of the growth in the number of nontraditional learners in the collegiate body, the alienating nature of learning in large classrooms with too many students, and the decline of freshman entry-level skills in reading, writing, speaking, listening, and thinking. However, there is a much earlier precedent, and George Jardine, professor of logic and philosophy at the University of Glasgow from 1774 to 1826, should figure prominently in any history of collaborative learning.

Jardine's pedagogical plan describes (1) the role of the teacher in the peer-editing process; (2) the rules peer-editors should follow; (3) methods of reporting criticism to the author and other class members; (4) ways to solve difference of opinion between critic and author; and (5) the advantages of such a system of examination. Jardine's work reflects that of more recent collaborative learning theorists like Bruffee and Jerome Bruner who assert that learning is essentially a social act. Jardine's methods of instruction and curriculum revision bear directly on the theory of language and the means of improving the power of communication by writing rather than by speech. (SAM)

by Lynee Lewis Gaillet
Kenneth Bruffee, the leader in twentieth-century collaborative learning theory and practice, traces the roots of collaborative learning in American college classrooms back to the early 1970's when changing educational needs necessitated adapting the traditional conventions of the college classroom to the needs of the new students ("Collaborative Learning and the 'Conversation of Mankind'" 637). He explains that conventional teaching strategies no longer satisfied the new student population who entered college as a result of open-door policies in the 1970's. Traditional pedagogy failed because of "the growth in the number of nontraditional learners in the collegiate body, the alienating nature of learning in large classrooms with too many students, and the acknowledged decline of freshman entry-level skills in reading, writing, speaking, listening, and thinking" (Wiener, "Collaborative Learning in the Classroom: A Guide to Evaluation" 52). Bruffee credits M. L. J. Abercrombie as the originator of collaborative learning and peer-editing; she asserted in her 1960 work The Anatomy of Judgment that "the diagnostic judgment of medical students could be accomplished ... only through collaborative learning" (qtd. in Bruffee, "Collaborative Learning: Some Practical Models" 642-43). However, over two
hundred years ago George Jardine, professor of logic and philosophy at the University of Glasgow from 1774 to 1826, created a similar pedagogical plan in his class in response to changing student demographics brought about by social and political changes. How much more appropriate it is to compare collaborative learning in the modern composition classroom to the work of George Jardine, who used peer-editing to teach writing skills as early as 1774.2

The profiles of Jardine's students and modern composition students are analogous. Similarly challenging educational conditions in twentieth-century America and eighteenth-century Scotland elicited a similar response from educators: to create new teaching methods to meet the needs of a changing student population. Scotland's democratic philosophy toward education and the growth and changes taking place in the industrial city of Glasgow gave rise to a new student population who came from diverse educational and socio-economic backgrounds. Like Bruffee, Jardine encountered a student population who was unprepared for traditional college classes taught solely by lecture. Jardine's primary objective in teaching his students was twofold: (1) to cultivate in students the ability to examine their own minds and reactions to outside information as the primary method of acquiring new knowledge and (2) to encourage them to communicate that knowledge through oral and written language (*Outlines* 65). These objectives are central to modern composition instruction as well,
particularly evidenced in the work of twentieth-century practitioner-researchers whose research is driven first by pragmatic logic and second by experience as these researchers seek an understanding of how writing is done, learned, and taught (North 22-23). Because of changing political and social conditions, both Jardine's students and American students who entered college under the 1960's and 1970's open-door policy had needs vastly different from their predecessor's.

In a chapter of his published work *Outlines of Philosophical Education* (1818), Jardine describes a method of peer review which he asserts brings about "incalculable advantages which cannot be obtained in any other way" (367). In this section of his treatise he stipulates: (1) the role of the teacher in the peer-editing process; (2) the rules to be followed by peer editors, whom he labels "examinators"; (3) the method of reporting criticism to the author and the other class members; (4) the ways to solve differences of opinion between critic and author; and (5) the advantages of such a system of examination.

**Jardine's Rationale and Plan for Student-Assisted Learning**

Jardine was a ground-breaker in classroom pedagogy. He strongly advocated the practice of using writing to teach his philosophy class, a practice which broke with the traditional lecture method of instruction. In the section of *Outlines* concerning pedagogical practices we currently
label "peer-editing," Jardine acknowledged that learning by writing was an unconventional teaching strategy and stated that "it may perhaps appear still more novel and hazardous to commit the determination of the merits of themes to the students themselves. Yet, according to the plan of conducting the business, this plan is absolutely necessary" (Outlines 366). He not only claimed that students learn by writing, but he also stressed that this pedagogical strategy will succeed only if all student papers are closely examined. He explains that the "attention of those students whose exercises are overlooked will soon become relaxed, their spirits depressed, and their feelings irritated. If our essays pass without notice, they naturally ask, why need we give ourselves so much trouble in composing them?" (367). Jardine insisted that all student work receive regular examination in spite of increased classroom size and the fact that many students came to the university not fully prepared for college classes. In response to changing educational conditions, Jardine designed a method of peer review so that each student could receive individual attention, weaker students could learn from stronger ones, and all students could improve their own writing by increasing their powers of criticism (Outlines 366, 371). In Outlines, Jardine fully explains his method for conducting peer-editing within his classroom—including both the procedure and the benefits. His detailed advice, which he characterizes as "too minute, perhaps," foreshadows
twentieth-century practices in collaborative learning (Outlines 394).

Jardine's method of conducting student-assisted learning began with the appointment early in the term of ten or twelve of the best students in the class as "examinators," a term he chose over critic or censor because it was "less assuming" (Outlines 367). The examinators were responsible for closely analyzing a certain number of themes and giving a detailed written report attached to the theme back to the author (367). Later in the term, Jardine paired students according to ability to "commit to each student the exercise of one of his class-fellows for the purpose of criticism" (371). This structuring of Jardine's class illustrates two of the most prominent theories of modern collaborative learning: (1) that both weak and strong students can benefit from a peer-editing system, and (2) that learning is a social act.

Jardine and Jerome Bruner: The Social Nature of Collaborative Learning

In a 1973 article entitled "The Uses of Immaturity," Jerome Bruner, a leading educational theorist, calls for a "system of student-assisted learning from the start in our schools" (50). He cites case studies of peer-assisted learning and points out that the findings from these research projects support the claim that the tutored students exhibit "a considerable increase in scholastic
performance" and that those doing the tutoring demonstrate "a very considerable increase" (50). Furthermore, he claims that by encouraging students to assume responsibility for the academic progress of each other, teachers will also foster a notable increase in self-worth and group pride of the students. Jardine argues that his method of peer-review is successful for similar reasons:

[T]he method of conducting the themes and criticisms of the first philosophy class, is highly beneficial, both to the authors and examinators; and has been found, from experience, an excellent expedient for calling forth the intellectual energies of the student. There are few situations in which young men can be placed more favourable to application and industry. (Outlines 374)

Jardine believed, as does Bruner, that students should assume responsibility for one another: "Esteem and confidence open the minds of ingenuous youth, and keep alive a sense of obligation and of duty" (Outlines 373).

Bruner saw the 1970's as a "time of deep revolutionary change" (50), and like Jardine, he pointed out that educational instruction must take into account changing times and socio-economic conditions:

Tinkering with details of school organization without making room for a means of absorbing the wider revolution into our ways of educating is surely unworthy of us as a species. (Bruner 50)
Both educators encouraged teachers to adapt their teaching methods to the changing needs of students in order to better prepare them for community life. In making a case for collaborative learning, Bruner suggests that this teaching method would not only aid students in the classroom but "would also provide an opportunity for responsible participation in communal problems" by training students to communicate with one another (50). Likewise, Jardine argued that by participating in collaborative learning settings students developed interpersonal traits necessary for business and community involvement. He states:

Thus, opposed to each other, with as much equality as can be expected, each student is furnished with the strongest motives to exert his attention and his ingenuity. It becomes a sort of single combat, in the presence of many spectators, and it has been found to produce attention and diligence in many when other motives had failed. (Outlines 372)

The great object is to combine the communication of such elementary knowledge as may seem necessary for assisting the subsequent pursuits of the students, with a system of exercise, calculated to form, in their minds, those intellectual habits which are indispensable at once to the cultivation of science, and to the business of active life. (Outlines 394)
Like many twentieth-century educators, Jardine viewed the classroom as a community where not only academic learning takes place, but also where students develop communication skills and a sense of obligation necessary for responsible participation in society. Peer-learning facilitates the acquisition of these skills necessary for communal living.

Jardine and Kenneth Bruffee: Two Similar Views of Collaborative Learning

Bruffee, Bruner and Jardine share a common belief that "peer critics are genuinely responsible for each other's academic growth, and for each other's well-being in class" (Bruffee "Two Related Issues" 80). Bruffee explains that if editors do not write thorough, tactful critiques of papers, then the authors are being short-changed (80). To avoid this problem and to ensure accountability between peer editor and author, both Bruffee and Jardine stipulate the rules for critiquing papers, the role of the teacher, and the goals of practicing peer criticism. It is revealing to compare the work of Bruffee to Jardine's findings of over two hundred years ago. As has been discussed in earlier chapters of this work, Jardine's philosophy of education uniquely paired his own observational theory with innovative teaching practices. Likewise, Bruffee's model of collaborative learning has been described as one "built on the delicate and necessary tension between theory and
practice" (Wiener 52). The work of twentieth-century composition theorists and practitioners parallels Jardine's thorough account of peer-editing point for point, as a comparison of Jardine's theories to those of Kenneth Bruffee will reveal.

Bruffee believes that the first goal of peer-criticism is to teach students to "distinguish and practice three kinds of reading crucial to good tutoring: descriptive, evaluative and substantive" ("Two Related Issues" 77). The tasks associated with each of these methods of reading directly correspond to the tasks that Jardine assigned to his examiners. Bruffee states that "to read descriptively is to examine a paper's form without regard to technical quality and opinions expressed in it" (77). Correspondingly, Jardine advised his examiners to first read over the whole theme "for the express purpose of fully comprehending its general outline... to give an account of the method in which it is conducted, and the particulars which follow in their order, from the beginning to the end" (Outlines 369).

Bruffee next instructs students to read evaluatively, which he defines as examining "a paper's technical quality while holding in abeyance responses to form and substance" (77). Similarly, Jardine states that after examiners have commented on the form of an essay, they are to "direct their remarks to the arrangement of the sentences, the choice of the epithets, the propriety and the use of figurative language" (Outlines 370).
Finally, Bruffee defines reading substantively as the ability to judge the content of the paper, "to respond to a paper's argument without regard to form and quality of expression" (77). Jardine asks his students to respond to one another's papers by judging the content as well. He says:

Finally [students] are instructed not only to report faults and defects, but, also, to point out those parts of the essay which best deserve to be read publicly in the class, that the author may be gratified with his success, and also that it may prove an encouragement to others. (Outlines 370)

Bruffee believes that the "second goal of practicing peer criticism is to increase tutors' respect for other students' minds, and to increase their ability to work collaboratively" ("Two Related Issues" 79). He encourages students to write clear critiques that are thorough and detailed as well as tactful, helpful and truthful (79). Jardine stresses these same qualities in written peer critiques:

There is one rule absolutely indispensable, and which is never allowed to be violated with impunity, viz, the criticisms, however just, must be expressed in liberal and becoming terms, with that diffidence and candour which are due from those who must be conscious of many defects and imperfections in their own performances. (Outlines
In fact, the students' respect for one another is the cornerstone of Jardine's plan for collaborative learning: he stresses the importance of mutual respect among students as he outlines each facet of his peer-learning plan and insists throughout this section of his work that "young persons will always prove docile and reasonable, when they feel that they are treated with candour, with kindness, and without any undue partialities." (373).

In the face of similar political and social situations, both Bruffee and Jardine insist that the kind of learning and writing that students find most useful in college is the kind that prepares them to enter business, industry, and government. Bruffee explains that "much of what we teach today-- or should be teaching--in composition courses is the normal discourse of most academic, professional, and business communities" (Bruffee, "Collaborative Learning and the 'Conversation of Mankind'" 643). Likewise, Jardine claims that "to secure a suitable education for young men destined to fill various and very different situations in life, the course of instruction . . . should be made to comprehend the elements of those other branches of knowledge upon which the investigation of science, and the successful despatch [sic] of business, are found chiefly to depend. (Jardine, Outlines 31)

Bruffee argues that collaborative learning is an integral part of the composition classroom because normal
discourse in business, government and the professions is "both written within and addressed to a community of status equals: peers" (643). He explains:

Collaborative learning provides the kind of social context, the kind of community, in which normal discourse occurs: a community of knowledgeable peers. . . . This is one of [student-assisted learning's] main goals: to provide a context in which students can practice and master the normal discourse exercised in established knowledge communities in the academic world and in business, government, and the professions. (643)

Although never explicitly using terms such as "community" and "social context," Jardine did foster collaborative work among his students by creating a sense of community and responsibility in his classroom. All students participated in the peer-learning procedures of the class, and all were responsible to each other under the rules of participation. Unless they adhered to the rules of the community and remained loyal and respectful to each other, Jardine's students were banished from involvement within the community of their peers and denied any advantage associated with participation. He even went so far as to compare the rules governing the interaction of his students to public communities and suggested that "it would be well for the public if laws of higher authority were as regularly observed, and as seldom violated" as they were in his
In outlining the students' responsibility to one another and to following the rules set up for participation in peer-editing, Jardine warns:

Such as are found to disobey these injunctions are considered as academical traitors, viewed with contempt and reproach, and, if the fact be proved against them, they are subjected to a forfeiture of their privilege . . . and deprived of the honours which they themselves may have otherwise deserved.

(Outlines 390)

These excerpts from Outlines indicate that Jardine, like Bruffee, took into account "social context" and "community" when establishing the learning environment of his class.

Bruffee places the responsibility of collaborative learning squarely on the teacher by stressing that the teacher must create conditions in which collaborative learning can occur. He explains that traditionally, collaborative learning has been viewed as extremely irresponsible and in the extreme as a form of plagiarism. In the traditional classroom, students talk and write primarily to the teacher toward the goal of receiving a grade. However, for collaborative learning to take place, the teacher must foster other relationships within the classroom. The teacher "must become an organizer of people into communities for a specific purpose--learning"

("Collaborative Learning: Some Practical Models 637).

Similarly, Jardine explains that the success of
student-assisted learning depends primarily on the "experience and prudence of the teacher" (Outlines 368). He attributes the success of this pedagogical technique to the students' "interest and honor combined with the exhortations of the teacher" (374). Both educators agree that it is critical for the teacher "not simply to take a laissez-faire attitude" but rather to "reapportion freedom and discipline within the classroom" so that "the teacher moves to the perimeter of the action, once the scene is set" (Bruffee 637). Jardine views the role of the teacher as one who sets up rules for conducting peer-evaluations so that "ignorance, conceit, partiality, and petulance, on the part of the juveniles. . . are altogether avoided" (368-69). He clearly stipulates that these rules are to be strictly adhered to, "from which [the students] are made to understand that there must be no deviation whatever" (369). However, once the rules are clearly outlined, Jardine advocates allowing the students freedom within these strictures to "exercise their powers of criticism" (371). By the end of the semester, the students, without any intervention from the teacher, are allowed to judge which of their classmates' essays should be awarded prizes. Jardine insists that "the professor takes no immediate share in this business" (Outlines 389), and he offers the following justification for entrusting the students with this responsibility:

I am inclined to give a decided preference to the exercise of this right as vested in the students...
Were the professor to take this duty upon himself, the charm of emulation would be dissolved at once, and every future effort among his pupils would be enfeebled. (Outlines 385)

In regard to the students' ranking of the themes as compared to his own evaluation, Jardine states that "upon more minute attention, however, I have frequently found reason to prefer the judgment of the students to my own" (Outlines 393). Jardine, like Bruffee, believes that the teacher should "move to the perimeter of the action" of collaborative learning and allow the students freedom to exert their own opinions and to learn from one another. In fact, Jardine states that by the close of the session, "the character, the abilities, the diligence, and the progress of students, are as well known to one another as their faces" due to their intense interaction with each other (Outlines 388).

Jardine should figure prominently in any history of collaborative learning, as evidenced by the method of student-assisted learning he devised and followed in his classroom at the University of Glasgow. His methods of instruction and curriculum revisions made in the course of logic and philosophy at the University of Glasgow bear directly on the theory of language and the means of improving the powers of communication by writing rather than by speech. He insisted on an interdisciplinary nature of rhetoric (although he never uses that term) in his philosophy class, and his theories and practices concerning
how students learn can be appropriated in a variety of academic disciplines.
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