Moris Triventi


Sociologica (ISSN 1971-8853)
Fascicolo 2, maggio-agosto 2012
A considerable growth of attention on higher education (HE) occurred in the last decades. The proportion of students enrolled boosted worldwide and HE became an important area of public expenditure. The expansion of access to HE has been often promoted by governments and education agencies and ministries, because it is viewed as a way to foster economic and socio-cultural development through human capital growth. Moreover, HE institutions have been increasingly asked to enlarge their functions beyond the simple provision academic instruction to undergraduate students, to embrace an “entrepreneurial” attitude within the HE market and to become accountable to its “stakeholders” (students, families, local communities and employers). These transformation posed crucial challenges to colleges and universities, which have been discussed in several books and articles.

The book under review, *Academically Adrift: Limited Learning on College Campuses* – by Richard Arum and Josipa Roksa (*AcAd* hereafter), can be included in this stream of publications, but it has some nice peculiarities. First, whereas most of the critics of HE institutions largely make use of anecdotal evidence, this book relies on a solid empirical base to make its arguments. Second, while the literature on college students traditionally focused on the value of HE for students in terms of satisfaction, degree completion or labour market outcomes, Arum and Roksa introduced another crucial academic outcome: students’ learning in the early years of college or university. The main aim of *AcAd* is to answer this question: how much students in four-year colleges and universities learn in terms of critical thinking, complex reasoning and writing skills? They argued that the modern societies based on the knowledge economy requires mastery of these competences, which can be considered as the “Twentyfirst century skills.” The relevance of such skills is also testified by the fact that teaching students to think critically and communicate effectively are considered the principal goals of HE by important agencies in the United States, such as the Secretary of Education, the Commission on the Future of Higher Education, and the American Association of University Professors.

The main thesis of the book is that “commitment to these skills appears more a matter of principle than practice” among US colleges, with “the end result that many students are only minimally improving their skills in critical thinking, complex reasoning, and writing during their journeys through higher education” [p. 35]. To demonstrate their thesis, the authors conducted an original research to systematically investigate the state of undergraduate learning in contemporary American colleges and universities. They developed a longitudinal survey to follow around 2,500 traditional-age students from Fall 2005 to Spring 2009, across a wide range of 29 four-year colleges and universities. Student learning is assessed using the Collegiate Learning Assessment (CLA), a test aimed to measure general skills-based competencies such as critical thinking, analytical reasoning, and written communication among college students. In particular, they used
the “performance task”, which allows students 90 minutes to respond to a writing prompt that represents a “real-world” scenario in which they need to use a range of background documents (from memos and newspaper articles to reports, journal articles, and graphic representations) to solve a task or a dilemma.

From the perspective of educators and policy-makers, the results reported in the book are alarming, and this is probably the reason why the book has attracted so much attention, even beyond the limited audience of HE scholars. Arum and Roksa found that, on average, students improved performance on the CLA by only 0.18 standard deviations over the first two years of college. On the basis of a literature review, the authors argued that in the 1980s the rate of learning among college students was nearly double the current one, signalling a clear negative trend over time. Furthermore, and even more disturbing, they estimated that 45 percent of students did not demonstrate any significant improvement in the CLA performance during their first two years of college.

*AcAd* does not simply report research results, but it also widely discusses the conditions of undergraduate learning, in order to identify the multiple factors at the basis of this limited amount of intellectual development among college students in the United States. Within a multidisciplinary framework, Arum and Roksa examined attitudes and behaviour of the actors involved in the process of teaching and learning in undergraduate education. They argue that many students, professors, and administrators are not focused primarily on undergraduate learning, but instead have become distracted by other institutional functions and goals. Therefore, “while higher education is expected to accomplish many tasks, […] existing organizational cultures and practices too often do not prioritize undergraduate learning” [p. 122].

On the student side, many college students have a low academic commitment: they entered HE poorly instructed, without precise goal and plans in mind, considering college years more as a life/social experience than an opportunity to develop their knowledge and skills. Students’ time allocation seems to reflect this attitude: on average, students in a typical semester spend only between 12 and 14 hours per week studying, which is approximately 50 percent less time than full-time college students did a few decades ago. Furthermore, they increasingly adopted strategic behaviour, such as cheating at exams and choosing easier and best-rewarding courses (in terms of grades), while avoiding the most difficult ones.

But this is only part of the story. Arum and Roksa pointed out that professors and administrators have also their faults in this process of “academic adrift”. Professors are partially responsible for the lowering of academic standards: for example, 50 percent of students reported that they did not take a single course in which they wrote more than 20 pages over the course of the semester. Moreover, since students’ evaluation are used by administrators as a means to assess the course quality and students tend to better reward easier courses, professors have the strong incentive to relax their workload requirements and grading standards in order to receive better teaching evaluations. Furthermore, investment of professors’ time and effort in undergraduate learning is undermined by the growing importance attributed by universities to research-related fund-raising and publications as key criteria for career promotion.

Since the authors have a background in social stratification research, they also devoted attention to heterogeneity in competences and learning across categories of stu-
dents. Thus, they examined whether colleges reproduce or reduce inequality in general skills-based competencies between men and women, and students with different social background and race/ethnicity. The authors did not detect any significant difference by sex in CLA performance neither when students entered college nor after two years, whereas with respect to parental education the authors describe a pattern of persistent inequality over time. The patterns of racial/ethnic inequality are even more upsetting, since African-American not only entered college with lower CLA but also gained less over time. The authors also try to explain the difference in CLA performance across groups and its variation over time. In line with previous research, they found that academic preparation is one of the most important features accounting for the social origin and racial gaps in critical thinking, complex reasoning, and writing skills and for its heterogeneous growth in the first two years of college. Furthermore, choice of HE institution and knowledge about college requirements also explain differences by social origin, while English-language competence partly explains the immigrants’ disadvantage.

On the basis of their findings, in the last chapter of the book Arum and Roksa discuss several areas of policy intervention, which can potentially help to improve the level of intellectual development among college students. They refer to improvement in primary- and secondary-school student preparation, development of a strong leadership in HE to promote an institution-wide culture of learning, enhancement of curriculum and instruction associated with academic rigor, and the promotion of initiatives aimed at rigorously measuring student learning. In particular, they stress the fact that more rigorous, appropriately demanding course requirements and standards must be put in place to ensure the development of critical thinking, complex reasoning, and written communication skills. On the contrary, study in group and peer relations seem to negatively affect learning or does not have any effect. Thus, the authors size down the enthusiastic emphasis that some scholars attributed to cooperative learning, and suggest that if collaborative learning is adopted as instructional model, this must be specifically structured and carefully assessed to ensure that adequate academic development is occurring.

After the description of the main contents and findings reported in AcAd, I now briefly summarize what I found to be the main pros and cons of the book, with the former overcoming the latter, in my opinion. I found the book interesting and provocative, but at the same time rigorous and well-documented. It is far from being a simple research report; on the contrary, it is informed with theoretical arguments and existing research results. The main findings are presented in narrative form, while tables and more technical details on the questionnaire, variables and statistical models can be found in the long methodological appendix. This should make the contents easier for those who are unfamiliar with statistical models but are interested in the substantial findings of the work. I also found appealing the fact that authors devoted an entire chapter to discuss implications of their findings for policy interventions, and that these suggestions are really linked to their findings, which is not always the case. This is an important point for quantitative sociology that aims not only to advance scientific knowledge per se, but also to inform policy-makers with empirical evidence.

The methodological procedures adopted are generally transparent and this is valuable since allows other scholars to replicate the study. First, it will help to develop future studies aimed at investigating whether the pattern of “academically adrift” found
in the United States is present in other HE systems too. Second, replication is useful to assess the robustness of the results. This is precisely what has been done by Pascarella and colleagues [2011], who used data from the Wabash National Study of Liberal Arts Education (WNS) to replicate Arum and Roksa’s analyses. Even if the WNS uses a different sample of institutions and an alternative test to measure student intellectual development, they found rather similar results, adding confidence to the main findings reported in *AcAd*. Furthermore, a subsequent research report by Arum, Roksa, and Cho [2011], which included data from the follow-up study after four-year of college, mainly confirmed previous findings.

Even if I appreciated the book and I found it generally convincing, I want to discuss some limitations and potential extensions of this study. The first one refers to the results related to the limited effort and learning showed by college students. On the first side, there is evidence of a decline in the weekly time students devoted to study and an increase in time devoted to social activities and paid work. While this result is consistent with previous evidence, I wonder whether part of the difference between past and recent estimates is related to changes over time in the reliability of this question. Since information about time allocation is rarely collected through time-diaries – which is the preferable method – we cannot exclude that in the past students were subjected to more social desirability than nowadays in reporting hours devoted to class attendance and personal study. On the second side, *AcAd* reports that students increasingly adopt strategic behaviour and conceive HE in an instrumental way. Thus, students may have little incentive in putting much effort in answering the CLA; if this phenomenon is more marked among senior than freshmen students, it could partially explain the limited growth in the CLA performance. It would be interesting to administer the CLA test, providing some kind of reward to the best performers, for instance college credits or a grade premium.

The second point refers to the research design and what can we learn from it. The longitudinal study at the basis of *AcAd* is useful to draw a picture of students’ initial level of general skills-based competencies and its development over time in the whole population of college students. Nevertheless, it hardly can say anything about the effect of college attendance on such development over time. To gather knowledge about this we should know how the CLA skills would change if the students who attended college did not attend college at all and, on the other side, how the CLA skills of those who did not attend college would change if they instead attended college. Of course, it is difficult to answer such question because it implies a counterfactual scenario; nonetheless, a parallel longitudinal study of comparable non-college students would help to illuminate this issue. As suggested by Pascarella and colleagues, indeed, “little or no gain during college does not mean that college is failing to add value. On some traits, such as quantitative skills, students do not always appear to progress much during college, but their counterparts who do not attend college actually retrogress substantially over the same period of time” [Pascarella *et al.* 2011]. Does this pattern hold for the CLA performance too?

Another issue refers to the estimate of the impact of attending a specific institution on learning development. The authors found that students in selective colleges not only have higher level of CLA, but also experience a larger growth of intellectual development, even controlling for other variables. Nevertheless, standard multiple regression models
may fail to properly account for all the differences among college types and this issue can severely affect the results of multivariate models, as shown by the growing literature on the estimation of causal effects from observational data. The literature on the impact of college quality on graduates’ labour market outcomes, for instance, has demonstrated that using counterfactual methods of estimation clearly weakens the estimated effect of college quality on earnings returns. Thus, it is reasonable to ask: does it occur for the CLA performance too?

At the end, it is useful to make some considerations about the role of critical thinking, complex reasoning and writing skills. Even if the authors did a good job in sustaining its relevance, it is not the only type of knowledge and ability transmitted by colleges to students. Since HE education is articulated in fields of specialization, fields of study transmit different technically-oriented or specific-in-content knowledge. Hence, a very interesting extension of this work would be to assess whether and how variations in general skills are related to those in subject-specific or occupationally relevant skills. Are students who experienced larger gain in CLA score also those who better improve their subject-specific knowledge? Are the fields of study with the larger increase in the CLA performance also those with the better improvement in the subject-specific skills? Or is it the opposite? Of course, answering this question is even harder that measuring general skills, because of the limited comparability across subjects, but it is a goal that should be pursued in order to even improve knowledge about teaching and learning in HE.

Moris Triventi
University of Milano-Bicocca

References

Arum, R., Roksa, J., & Cho, E.

Pascarella, E.T., Blaich, C., Martin G.L. and Hanson, J.M.