Learning at the university

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About ten years ago, interest in improving the level of teaching at the university level bubbled up to the surface again. Whether it came from increasing student dissatisfaction or from growing awareness by the colleges themselves, the need to teach more effectively became a goal with many major universities and colleges. In the meantime, the research on teaching has advanced considerably over the last 20 years causing a change in the paradigm for what good teaching looks like and how it works. College teaching meanwhile was caught in the old paradigm based on John Locke’s assumption that the untrained student mind is like a blank sheet of paper waiting to be filled by the wisdom of instructors. In the process of lecturing to passive students and testing them on what they have “learned” instructors could sort and classify students in a norm-referenced, competitive fashion. Many first year students would arrive on campuses, attend several large lecture classes; leave their last class and not knowing anyone, go home. Many did not come back for their next year, not because they could not make it academically but because they were isolated, lonely and felt no connection to other students, to faculty or to the institution.

In examining the research on learning and teaching, a new paradigm was developed by colleges looking for a better way (Association of American Colleges, 1985). The new paradigm stressed that each student constructs their own meaning to what they are learning and can best do that by being actively engaged in the learning process rather than passively taking notes and memorizing them for the test. Students are connected to each other in small groups in class and challenged to talk through what they are learning and get feedback from one another. Students get to know each other in class and can greet many students by name as they cross the campus, perhaps meeting together to extend class discussion or get a start on homework. It is apparent that Higher Education has underestimated the effect of positive relationships in the learning process. Work on what factors correlate with student satisfaction and success at the college level found that positive student/student interaction had the highest correlation, and that positive student/faculty relationships was close behind as the second highest correlation. Students get to know each other better as they interact in the small groups following lecture or reading and use the new information to solve problems, address concepts or think more divergently. Faculty get to know the students personally as they monitor and interact with the small groups. Faculty who have used active learning methods have come to realize that teaching students do think more critically, engage in academic conversation and intellectual argument, develop skills to work together more effectively with each other, and develop more positive feelings about their subject matter, their instructors and the institution are all important objectives too.

This journal edition looks at some of the research that is growing out of examining some of these “new paradigm” concepts in college classrooms. There is consistent evidence that the above philosophy has produced a flourishing and long standing line of research, as reported in the meta-analysis by Johnson & Johnson, this issue’s first article. It reviews the results of over 249 studies that have addressed the issue of cooperative learning at the university; several benefits are pointed out – in terms of achievement, interpersonal attraction, psychological health and attitudes toward the university experience —, and the key mechanisms that make cooperative learning effective are enhanced — such as positive interdependence, individual accountability, face-to-face promotive interaction, appropriate use of social skills, and group processes. Hints on the implementation of cooperative learning at the univer-

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sity are proposed. The second article, by Tjosvold, Wong, Nibler & Pounder, presents a study that shows the benefits of teamwork and controversy in Hong Kong university undergraduate strategic management courses, in terms of team effectiveness. These results extend the above-presented ideas by suggesting that not only cooperative teamwork can be effective in undergraduate training, but that it may also help prepare students to work in the emerging team organization. The third article, by Daron, Buchs & Butera, aims at specifying the role of conflict in cooperative learning at the university. When interacting during university cooperative work, individuals may experience two different motives: Understanding the problem, or affirming their competencies. When a conflict emerges from this interaction, it can be solved either in an epistemic way, focused on task resolution, or in a relational way, focused on the social comparison of competencies. This distinction seems particularly relevant for designing educational settings at the university, since the reported results show that a relational conflict can motivate students defensively and hinder learning.

While the first three articles focus on the dynamics at work in cooperative learning at the university, the following three focus on the representation university students have of their own competence, a factor that appears to be a major moderator of academic achievement. Mugny, Quiamzade, Pigière, Dragulescu & Buchs report evidence that course contents were more extensively adopted when the instructor presented the course’s contents in a democratic (rather than authoritarian) way and the participants a) were highly involved in the task and b) felt highly competent with respect to this type of task. These results support a correspondence hypothesis, according to which appropriation of knowledge is favored when relevant characteristics of the influence relationship match key expectations that individuals have concerning this relationship. The beliefs about own academic competencies are also at the core of the article by Croizet, Dutrévis & Désert. Based on the stereotype threat hypothesis, their study revealed that students holding technological baccalaureates performed worse, reported lower state self-esteem and lower motivation towards education when a test they had to perform was presented as ability-diagnostic, thereby activating the stereotype of low intellectual ability that stigmatize them. No such effect was observed for students holding a more prestigious general baccalaureate. Finally, Tafani, Bellon & Moliner report evidence that the experimental induction of success or failure in higher education has an impact on self-esteem and on the very social representation of what higher education is. A negative feedback in a test lowered academic self-esteem that mediated the lower importance attributed to the studies, whereas a positive feedback increased self-esteem that mediated an increase in how much they value the involvement in the studies.

The present special issue “Learning at the university” presents a set of articles that argue that learning at the university is not merely a matter of attending the class, listening to the teachers, taking notes and rehearsing. It appears that it is instead a complex process of social influences, intervening at different levels, namely at the interpersonal level – as in cooperative work and in confrontations to the teacher –, at the intergroup level – as shown by the stereotype threat hypothesis –, and at a higher representational level. The challenge of the renewal in higher education will be to transform this complexity into action.

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