Beyond Classroom Walls: Students' Out-of-class Peer Experiences and Implications for Teaching and Learning

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＜Abstract＞

Students' engagement with learning is closely connected to their participation in learning communities within and beyond the classroom. This paper examines the nature of students' out-of-class peer experiences. It reports on a study of Australian undergraduate students across three year levels in a research-led university. The most common reason for making contact with peers was to discuss assignments. There was a strong connection between satisfaction levels and frequency of peer interaction. The study contributes to an understanding of the changing nature of the student experience beyond formal classroom contexts. The paper concludes by considering implications for teaching and learning in higher education.

1. Introduction

Students' engagement with learning in higher education is an issue of growing research interest internationally, and at the national and institutional levels in many countries. The United States has led the way in this regard through the well established National Survey of Student Engagement (NSSE, 2005). However, other nations, including Australia (see for example Krause et al., 2005) are now developing their own context-specific approaches for investigating this important dimension of the

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undergraduate student experience.

Engagement with learning results from a combination of factors including classroom experiences, coursework and curricular patterns, and out-of-class experiences (Terenzini & Reason, 2005). While classroom experiences and coursework patterns are relatively easy to observe and document, students' out-of-class experiences pose a greater challenge for the higher education researcher. This paper reports on a study of commuter students' out-of-class peer experiences across three year levels in one academic department of a public research-led university in Australia.

2. Student engagement and learning communities

Kuh (2003) defines engagement as active participation in activities that promote student learning, including time-on-task, collaborative learning and interaction with faculty. However, as the character of the so-called 'Y Generation' (Krause, 2005b) of the 21st century emerges, so our understanding of the changing nature of student engagement with university must evolve to take account of the increasingly complex nature of student commitments and priorities. Student engagement with higher learning appears to be in a state of flux. In Australia, undergraduate students – predominantly commuter students – are typically spending less time on university campuses (Krause et al., 2005). Similar trends are evident internationally. Across the US, the average first year student reports spending less time studying per week (HERI, 2002; see also NSSE, 2005; Sax et al., 2002); while in the UK, students are spending less time on campus and on their studies (see for example, Macdonald, 2001; Tangney & Pugh, 2002).

The time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development (Astin, 1993; Pascarella & Terenzini, 2005). Learning communities are pivotal to fostering such activities. In learning communities, students build networks with peers which provide both academic and social support (Tinto, Love & Russo, 1993). However, as King and Wooten (2003) note, there are several obstacles to building community, particularly on com-

muter campuses which are the norm in the Australian higher education, and in many other countries, including the UK and Japan. These obstacles include: the time required to build community; the increasing diversity and fragmentation of the student population (Levine, 1998); the growing use of information and communication technologies (ICTs) which can lead to isolationism and individualism; student pragmatism and a career focus which makes them question spending time on anything but the essentials of study and assignments; and the apparent apathy of the Y Generation which results in fewer students taking part in campus-based activities.

3. Out-of-class experiences in higher education

Traditionally, out-of-class experiences have been defined as taking place within an institutional context, relating to students' academic endeavours, and contributing to student learning outcomes (Terenzini et al., 1995).

Out-of-class experiences span diverse contexts including formal and informal interaction with peers and faculty, involvement in campus cultural, sporting and social events and co-curricular activities such as orientation events and programs. They include intangible elements such as the culture of a campus or faculty and the hidden curriculum evident in the values of an institution.

Positive out-of-class experiences promote student engagement and integration in higher education, enhancing satisfaction and retention (Light, 2001; Tinto, 1993). A significant determinant of the quality of the student experience is the extent and nature of peer interactions with the learning community.

4. Peers in the university learning experience

Peer interaction is a key to the success and dynamic nature of learning communities (Astin, 1993; Pascarella & Terenzini, 2005). Social interaction with peers is positively related to the quality of student effort and in turn, satisfaction, learning and persistence (Krause, 2005a; Tinto, 1993). Students who fail to find their niche in their university's social and academic

system tend to have low levels of institutional commitment and degree completion (Astin, 1993). Involvement with peers is a significant factor in perceived institutional and peer support and a positive predictor of involvement with faculty (Milem & Berger, 1997). In the first year experience, particularly, friendship networks are a key to successful adjustment (Krause & Duchesne, 2000).

There are many opportunities for peer interaction and collaboration in university learning environments, yet it seems that a surprisingly large proportion of students do not take advantage of them. A recent national trend study of first year students in Australian universities found that over two-thirds of students hardly ever, or never, work with other students on areas of study where they have problems, while fewer than half (40%) regularly spend time discussing subject-related issues with peers (Krause et al., 2005).

5. ICTs and the changing nature of social interactions

A significant force shaping social interactions on university campuses is that of ICTs. These include mobile technologies, such as mobile phones or ipods, laptop computers, wireless internet access, and online discussion. These forms of media and communication have the potential to transform the face of teaching and learning in higher education, and in some cases, this is already taking place (see for example, Krause, 2004a, 2004b, forthcoming; Kuh & Vesper, 2001; Pascarella & Terenzini, 1998).

Computer-mediated communication (CMC) comes in several forms, the most commonly used of which are email and, to a lesser extent, bulletin boards or online discussion fora in educational settings (Krause et al., 2005). While the benefits of ICTs and CMC are widely acknowledged (Chin & Carroll, 2000), there appears to be a gulf between the possibilities and the practical realities in terms of student usage of them. For example, Krause et al. (2005) found that more than half of Australian first year undergraduates (56%) had not participated in course-related online discussion groups. Closer study of the types of technologies students use and their impact on the quality of learning and interactions is warranted.

Compelling evidence points to the changing nature of student engagement (Yorke, 2003) and the student experience (Krause, 2005b). Given the demonstrated increase in students' off-campus commitments and the importance of social interaction in fostering a sense of belonging to the learning community, this study investigates the frequency and nature of undergraduate students' peer interactions in the changing higher education context.

6. Method

6.1 Conceptual Framework

The conceptual framework for this study is drawn from the widely acknowledged college impact research in the United States (e.g., Astin, 1993; Kuh & Vesper, 1997; Pascarella & Terenzini, 1998, 2005), along with extensive national research data on the university experience in Australia. The framework for the study is based on the conceptual model of Terenzini and Reason (2005) depicting the reciprocal relationships between students' classroom experiences, their coursework and curricular patterns and out-of-class experiences in the institutional context. The model also proposes that students' pre-college/university traits have a direct bearing on each of these variables, which in turn affect learning outcomes.

6.2 Participants

All undergraduate students in a single academic department of a large Australian research-led public university were surveyed. The department falls into the broad disciplinary category of humanities and social sciences. In light of the importance Terenzini and Reason (2005) attach to coursework and curriculum patterns, the sample was chosen on the premise that it represents a relatively cohesive learning community in which students move through a three-year degree in cohort groups within a tightly structured coursework program. At the time of data collection, coursework in this department was offered in traditional face-to-face mode, with all students required to attend weekly on-campus lectures and tutorials. The online components of the coursework were either supple-

mentary lecture materials available on the web, or communication facilities such as discussion fora and email. No subjects were delivered solely online.

The sample comprised a greater proportion of males (57%) than females (43%) with ages ranging from 17 to 47 years (mean age 21 years). Only six per cent were non-traditional age students (that is, older than 25 years). The majority were enrolled full time (96%) and were commuter students (94%). Approximately one third of the sample were international students (predominantly south-east Asian), for whom English is a second language. First year students comprised 38 per cent of the sample. One quarter (25%) of students were in their second year of study, and third (final) year students made up 37 per cent of the group. Further details of the sample are presented in Table 1.

Table 1 Sample demographics

	Gender		Age	
	Male n (%)	Female n (%)	Traditional n (%)	Non-Traditional n (%)
Total Sample	279 (57%)	209 (43%)	461 (94%)	27 (6%)
	Home Location		**Study Mode**	
	International n (%)	Local n (%)	Full-time n (%)	Part-time n (%)
Total Sample	160 (33%)	328 (67%)	468 (96%)	20 (4%)

6.3 Design, Procedure and Analysis

A paper survey was distributed to all students across three undergraduate year levels (Years 1 to 3), attending lectures in the department early in Semester 2 of the academic year. The survey comprised mainly closed Likert-type items, with two open-ended questions at the end. It

included items on: i. demographic background; ii. part-time paid work commitments; iii. attitudes to and perceptions of university experience; and iv. the extent and nature of out-of-class peer interactions. Students completed the survey in approximately 10 minutes during nominated lectures and 488 were returned. Approximately two-thirds of all undergraduate students in the department were present at the lectures and the response rate among those in attendance was extremely high – 100 per cent in some cases.

Quantitative data were analysed using SPSS software. After collating descriptive statistics, cross-tabulations were undertaken. Independent t-tests and chi-square tests were conducted to determine significance levels of relationships between nominated variables. All significance levels are reported at $p<0.01$. Qualitative data collected via the two open-ended questions are not reported in this paper.

7. Results and Discussion

7.1 Interacting with peers in the learning community

Across the three year groups sampled, the most common form of peer interaction was to discuss assignments with peers. A substantial majority (81%) of all students had contact with peers for this purpose on a daily or weekly basis. The majority of students (64%) met with peers socially at least weekly. This included chatting over coffee or lunch, or meeting in an extracurricular club setting. Such engagement with the learning community in both academic and social activities is much more apparent in this sample of students than it is at the national level in Australian universities (see Krause et al., 2005). Reasons for this may include the strong cohort effect and the nature of collaborative assignments within this department, though there may be other explanations. Additional forms of peer interaction are shown in Table 2, in order of frequency of occurrence.

Table 2 Forms of peer interaction in order of frequency of occurrence

(expressed as a percentage of total sample)

Form of interaction	Percentage of students who interact daily or weekly	Percentage of students who *never* interact in this way
Discussing an assignment	81%	2%
Meeting socially with peers in the course	64%	8%
Collaborating on a project	62%	5%
Working on a course area where I have	41%	12%
Borrowing course materials from friends	34%	15%
Studying for a test or exam	27%	16%
Emailing another student about the course	10%	50%
Using online discussion groups in the course	8%	72%

7.2 Peer interactions and student satisfaction

Several significant interrelationships emerged between students' attitudes and perceptions and the extent and nature of their peer interactions. There was a statistically significant relationship between the frequency of out-of-class peer interactions and student satisfaction with their university experience and enjoyment of their course overall. Students who interacted with peers regularly were more likely to report positive perceptions of their ability to cope with their study load and to balance study with other aspects of their life, including paid work off campus.

Those students reporting the greatest level of satisfaction with their academic progress were typically the ones interacting with peers most frequently and for an array or reasons, including academic – studying for a test or exam, discussing an assignment, collaborating on a project, and meeting socially. Those least satisfied with their academic progress were significantly more likely to restrict their peer interactions to borrowing course materials from friends.

Students were asked to indicate how satisfied they felt with how they were balancing study with other aspects of their lives, such as paid work,

sport, and household commitments. Those indicating the highest levels of satisfaction in this area reported engaging with peers, both socially and academically, more frequently than their less satisfied classmates. In other words, they met socially with peers in their course and discussed assignments significantly more often than their peers. Notably, the students most satisfied with their ability to balance commitments were also the ones who used email and online discussions more than other students in the course.

On the other hand, students who felt under pressure in their course most of the time typically socialised with peers in their course least often. They also had a greater tendency to borrow course materials from friends. These students' peer interactions were limited to working on a course area where they had problems, or studying for tests or exams with peers.

The data depict two patterns of interaction which are closely related to students' sense of coping and satisfaction with their study and the place it occupies in their lives. Students who feel under pressure typically restrict out-of-class peer interactions to task-focussed activities. They demonstrate a "just-in-time" mentality which, while accomplishing short-term academic goals, such as studying for a test or solving a course-related problem, does not necessarily foster satisfying longer-term learning experiences. Students indicating higher levels of satisfaction with their academic progress and their ability to manage study and other dimensions of their lives, typically interact with peers in a combination of social and academic contexts. They demonstrate a "just-in-case" approach, building up social networks beyond the short-term academic tasks. Such an approach is positively associated with developing a greater sense of belonging in the learning community.

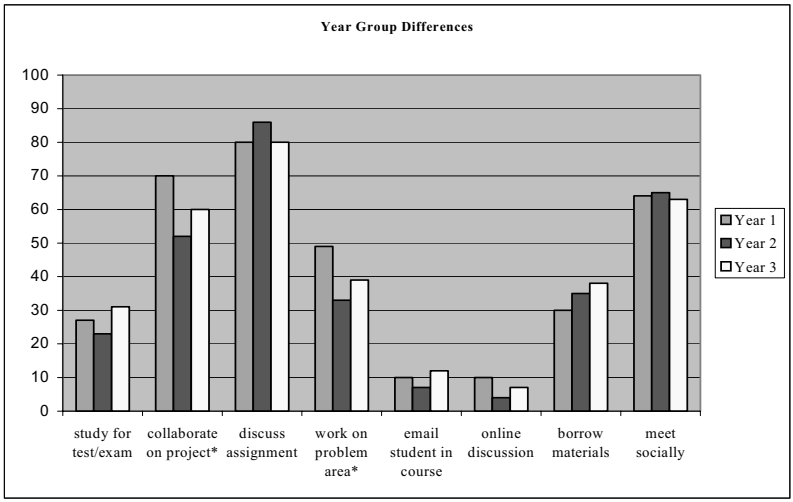
7.3 Group differences in peer interactions

Year group differences

Year group cohorts are a feature of the degree structure in this academic department. First year students collaborated significantly more with peers on projects, and consulted with peers about course-related

problems significantly more than their second and third (final) year counterparts. Second year students participated significantly less than did other year groups in peer collaboration on projects, and they consulted less frequently with peers when they encountered course difficulties. Students in their second year of study also studied less with peers than first and third years, and participated less in the use of computer-mediated communication (CMC). Yet they met socially somewhat more than their first and third year counterparts. A summary of year group differences in peer interaction among this sample is presented in Figure 1. The "second year slump" phenomenon is a noteworthy one, pointing to the unique experiences and needs of students in their second year of university study (see Schreiner & Pattengale, 2000).

Figure 1. Year level differences in peer interaction



* indicates significant difference ($p<0.01$) between first years (significantly more) and the rest of the sample, and between second years (significantly less) and the sample.

Gender differences

There were no significant gender differences in the ways students in-

teracted with their peers, however some trends are evident. Males tended to work with peers on task-specific areas such as studying for a test, working on a project or discussing assignments. Females on the other hand typically approached peers more frequently when they had course-related problems or when they needed to borrow course materials. Females also socialised slightly more than males. In terms of CMC, males used email somewhat more than females, while the reverse was true in the case of online discussion groups.

Achievement level differences

There was a significant statistical relationship between achievement and the way students related to peers in their course. Those in the mid to high achievement bands (i.e., with a course average of 71-80%), typically collaborated with peers and discussed assignments and course-related problems more frequently than did students with lower achievement scores, regardless of year level. Conversely, those scoring below average grades in the course tended to discuss assignment-related issues significantly less than did their peers across all year levels.

Terenzini et al. (1995) commented on the need for closer investigation of the kinds of social interactions which proved educationally beneficial for learners in higher education. These findings go some way towards highlighting the value of time spent interacting with peers in course-related discussions.

International and local student differences

International students made up just over one third of the total sample, reflecting the national trend. The majority of these students were from south-east Asian countries and English was not their native language. Table 3 summarises key differences between the peer interactions of international and domestic Australian students in the sample. In this department, international students sought out peers, to discuss course areas where they were encountering difficulties, significantly more than local students, yet they met socially with classmates significantly less than their peers. International students typically made greater use of CMC on a

regular basis. They also tended to study with peers for tests and exams, and borrowed course materials more than their local peers. This investigation did not examine whether these interactions were predominantly with other international students, but this will be the subject of future investigations. Broadly, the international students in this sample typically engaged with peers in task-focussed academic activities, rather than in social settings. These differences in demographic subgroup peer interactions align with Tierney's (1992) findings regarding the role of cultural differences in students' social interactions. Krause et al. (2005) expressed concern at the apparently lower level of social integration of international compared to local students in a national first year sample. The integration of international students into university learning communities has become a priority in many Australian institutions.

Table 3 International and local student differences in peer interaction

(expressed as a percentage of international (n=163) and local (n=325) sample respectively)

Form of interaction	% of international students who interact daily or weekly	% of local students who interact daily or weekly
Studying for a test or exam	29%	26%
Collaborating on a project	61%	62%
Discussing an assignment	77%	83%
Working on a course area where I have	54%	36%*
Emailing another student about the course	12%	9%
Using online discussion groups in the course	9%	7%
Borrowing course materials from friends	39%	31%
Meeting socially	53%	69%**

*indicates significant difference ($p<0.01$) and ** ($p<0.05$) between international and local sample

7.4 Differences in use of computer-mediated communication (CMC)

Computer-mediated forms of communication did not feature strongly as

a means of interaction among students in this sample. There was little evidence of students interacting online for discussion purposes, or via email. A large proportion (72%) of students surveyed had never engaged in online discussion groups for academic purposes, while half had never emailed another student about their course. First year students who were 19 years or younger (that is, recent school graduates) reported using online discussion groups to collaborate significantly more than did students in other age groups. This is consistent with the increasing familiarity with and widespread use of ICTs in school learning contexts from which these young people come (see Prensky, 2001).

A significant relationship was found between use of CMC and student achievement. Those with university entrance scores in the lower achievement bands used email to correspond with peers in their course significantly more than did higher achievers. One reason for this includes the anonymity afforded by electronic forms of communication. It is acknowledged that CMCs provide a "safe" vehicle for communicating with faculty and peers, particularly when students feel nervous or insecure about asking questions or contributing in face-to-face group contexts (Krause & Duchesne, 2000). In particular, students with lower achievement levels may feel insecure and lack confidence in the presence of their peers and/or teachers. CMC can provide an avenue of communication that may build these students' confidence and encourage them to contribute to and participate more fully in the learning community (Gatz & Hirt, 2000).

Notably, students who felt most overwhelmed by their study workload tended to use electronic forms of communication in the form of email and online discussion more - and to meet socially with peers less frequently - than peers who felt they were coping with the workload. Conversely, those most satisfied with how they were coping with their subject load in the course typically reported more frequent face-to-face socialising with classmates, and less frequent email and online discussion activity with peers than those who felt they were not coping well. While these patterns need to be explored more fully, they contribute to the growing debate regarding the limitations of CMC as a poor substitute for face-to-face interactions (Krause, forthcoming). Those who feel they are coping best with

their studies appear to capitalise on opportunities for face-to-face social engagement. Students who report being overwhelmed with their study workload may use online communication for a number of reasons, including perceived lack of time or feelings of intellectual or social inadequacy within their peer group. While online communication serves an important purpose, it should be seen as only one of a raft of communication forms, rather than as a substitute for students engaging with peers face-to-face.

8. Implications and Future Directions

Two key implications for teaching and learning are proposed as a result of this study. First is the need to develop community through interactivity in the classroom. This may be accomplished through active learning techniques, group assignments, or teamwork, to name a few. Interactivity must extend beyond the classroom walls to online environments. Faculty may explore the possibilities of communication via online discussion, podcasting, text messaging, blogs and the like. The technology promises much, but is a useless tool unless faculty develop skills to harness its power (Kirkwood & Price, 2005). Mann (2005) draws attention to the importance of dialogue and communication in the learning environment, between learner and learner, and between learner and teacher. She contends that faculty need to be more aware of students' desires, interests and fears, as well as their current approaches to study and learning, and their experience of learning as a whole. This requires a keen awareness of how students live their lives beyond the classroom.

A second implication of this study pertains to the need to engage and stimulate students intellectually within the learning community. The importance of intellectual stimulation as part of the integration process is well established (Pascarella & Terenzini, 2005). While peer interaction is one vehicle towards this end, engagement with the broader research community is another. We are yet to fully explore the avenues for connecting students with research and research communities from early in their first year (Krause, 2005c, see also Vest, 2005). Connecting students to

the research community enriches their intellectual experience and provides them with a sense of belonging to an intellectual research community including faculty, fellow students and a broader disciplinary community of researchers worldwide.

This study is limited by the fact that it represents the experiences of undergraduate students in a single department of one Australian university. Caution is also needed in interpreting results from the point of view of frequency counts alone. The extent to which students engage in a particular form of interaction does not necessarily equate with quality. Nevertheless the results point to the value of investigating the variable nature of students' peer experiences across year levels and groups, and beyond the classroom.

References

Astin, A., 1993, What matters in college? Four critical years revisited, San Francisco: Jossey-Bass.

Chin, G., & Carroll, J. M., 2000, "Articulating collaboration in a learning community", *Behaviour and Information Technology,* 19(4): 233-45.

Gatz, L. B., & Hirt, J. B., 2000, "Academic and social integration in cyberspace: Students and e-mail", *The Review of Higher Education,* 23(3): 299-318.

Higher Education Research Institute (HERI), 2002, *The American Freshman: National Norms for Fall 2001* (http://www.gseis.ucla.edu/heri/heri.htm)

King, N. S., & Wooten, B. M., 2003, "Building community on a commuter campus", T. L. Skipper & R. Argo (Eds.), *Involvement in campus activities and the retention of first-year college students* , Monograph 36: 51-62, Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

Kirkwood, A., & Price, L., 2005, "Learners and learning in the twenty-first century: What do we know about students' attitudes towards and experiences of information and communication technologies that will help us design courses?", *Studies in Higher Education,* 30(3): 257-74.

Krause, K. (forthcoming), "E-learning and the e-generation: The changing face of higher education in the 21st Century", J. Lockard & M. Pegrum (Eds.), *Brave new classrooms: Educational democracy and the internet*, New York:

Peter Lang Publishing. (expected March 2006)
Krause, K., 2005a, "Serious thoughts about dropping out in first year: Trends, patterns and implications for higher education. *Studies in Learning, Evaluation, Innovation and Development,* 2(3): 55-67. (http://sleid.cqu.edu.au/)
Krause, K., 2005b, *The changing student experience: Who's driving it and where is it going?* Keynote presented at the Student Experience Conference, Charles Sturt University, NSW, 5-7 September 2005. (http://www.cshe.unimelb.edu.au/Krause.html)
Krause, K., 2005c, *The changing face of the first year: Challenges for policy and practice in research-led universities*. Keynote presented at the University of Queensland Annual Teaching and Learning Week, First Year Forum. University of Queensland, QLD, 31 Oct 2005. (http://www.cshe.unimelb.edu.au/Krause.html)
Krause, K., 2004a, *Online learning experiences: Implications for quality learning and teaching in higher education*, Association for the Study of Higher Education Conference, 2-7 November, Kansas City, USA.
Krause, K., 2004b, *e-Education and the changing student experience: Policy implications.* Paper accepted for the International Conference on Computers in Education, Nov 30-Dec 3, RMIT, Melbourne, Australia.
Krause, K., & Duchesne, S., 2000, *With a little help from my friends: Social interactions on campus and their role in the first year experience.* Paper presented at the Fourth Pacific Rim Conference: First Year in Higher Education – Creating futures for a new millennium, 5-7 July, Brisbane, Australia.
Krause, K., Hartley, R., James, R., & McInnis, C., 2005, *The first year experience in Australian universities: Findings from a decade of national studies*. Canberra: Australian Department of Education, Science and Training.
Kuh, G., 2003, What we're learning about student engagement from NSSE: Benchmarks for effective educational practices, *Change 35*.
Kuh, G. D., & Vesper, N., 1997, "A comparison of student experiences with good practices in undergraduate education between 1990 and 1994", *The Review of Higher Education,* 21: 43-61.
Kuh, G.D., & Vesper, N., 2001, "Do computers enhance or detract from student learning? ", *Research in Higher Education,* 42: 87-102.
Levine, A., 1998, *When hope and fear collide*, San Francisco: Jossey-Bass.
Light, R. J., 2001, *Making the most of college: Students speak their minds*,

Cambridge, MA: Harvard University Press.

Macdonald, D., 2001, *The debt trap.* Guardian Unlimited. (http://education.guardian.co.uk/students/story/0,9860,547840,00.html)

Mann, S. J., 2005, "Alienation in the learning environment: A failure of community?", *Studies in Higher Education,* 30(1): 43-55.

Milem, J. F., & Berger, J. B., 1997, "A modified model of college student persistence: Exploring the relationship between Astin's theory of involvement and Tinto's theory of student departure", *Journal of College Student Development,* 38(4): 387-400.

National Survey of Student Engagement (NSSE), 2005, *Exploring different dimensions of student engagement: 2005 Annual Survey Results,* Bloomington, IN: Center for Postsecondary Research.

Pascarella, E., & Terenzini, P., 2005, *How college affects students, Vol.2,* San Francisco: Jossey-Bass.

Pascarella, E., & Terenzini, P., 1998, "Studying college students in the 21st century: Meeting new challenges", *The Review of Higher Education,* 21(2), 151-65.

Prensky, M., 2001, "Digital natives, digital immigrants", *On the Horizon,* 9(5). (http://www.rutherfordschools.org/rhs/social/hermitagefiles/Prensky1.pdf)

Sax, L. J., Gilmartin, S. K., Keup, J. R., Bryant, A. N., & Plecha, M., 2002, "*Findings from the 2001 pilot administration of Your First College Year (YFCY): National norms",* Higher Education Research Institute, University of California, Los Angeles. (http://www.gseis.ucla.edu/heri/yfcy/yfcy_report_02.pdf)

Schreiner, L. A., & Pattengale, J. (Eds.), 2000, *Visible solutions for invisible students: Helping sophomores succeed* (Monograph NO. 31), Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

Tangney, S., & Pugh, R., 2002, *Term time employment and its impact on student learning.* (http://www.agcas.org.uk/publications/phoenix/summer_2002/term_time_employment.htm)

Terenzini, P., & Reason, R., 2005, *Parsing the first year of college: A conceptual framework for rethinking college impacts.* Paper presented at the Association for the Study of Higher Education, November 19, 2005, Philadelphia, PA.

Terenzini, P. T., Springer, L., Pascarella, E. T., & Nora, A., 1995, "Influences affecting the development of students' critical thinking skills", *Research in Higher Education,* 36: 23-39.

Tierney, W. G., 1992, "An anthropological analysis of student participation in college", *Journal of Higher Education,* 63(6): 603-18.

Tinto, V., 1993, *Leaving college: Rethinking causes and cures of student attrition* (2nd ed.), Chicago: University of Chicago Press.

Tinto, V., Love, A. G., & Russo, P., 1993, "Building community", *Liberal learning,* 79(4): 32-5.

Vest, C. M., 2005, *Pursuing the endless frontier: Essays on MIT and the role of research universities*. Cambridge, MA: The MIT Press.

Yorke, M., 2003, *Transition into higher education: Some implications for the 'employability agenda'*. Liverpool John Moores University: Learning and Teaching Support Network Generic Centre.

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教室の壁を越えて

－学生の課外体験が教育・学習にもたらす意味－

ケリー・リー・クラウズ

＜要　旨＞

学生の学習への取り組みは、教室の内外における学習コミュニティへの参加と大きく結びついている。本稿は授業時間外における学生間コミュニケーションの特徴について検討する。その内容は、オーストラリアの研究大学の学部３年生を対象に実施した調査結果に基づく。学生間コミュニケーションの動機として最も一般的なのは、授業の課題について話し合うことであった。大学での学習・生活に対する満足度とコミュニケーションの頻度には大きな関連性がある。考察の結果、教室空間の外側で学生の学習経験に変化が起こりつつあることが明らかとなった。最後に、この変化が大学の教育・学習にもたらす意味について結論をまとめる。

オーストラリア グリフィス大学高等教育研究所長