

## Intensive Teaching Formats: Report of the Working Group<sup>1</sup>

Intensive teaching models—also known as “accelerated” or “time-shortened” teaching, “block format”, “compressed” courses, as well as “alternative”, “flexible” and “intensive” modes of delivery—have been defined in various ways. For the purposes of this report, we use the term “intensive teaching format” and consider their use in the postgraduate program.<sup>2</sup> We also assume that they involve the same ratio of class contact hours to credits as other subjects.<sup>3</sup> Within these parameters, intensive teaching may be offered in a compressed format (i.e. over a shorter period of time than the traditional 12 weeks) and in longer classes (i.e., longer than the traditional 3 hours postgraduate class).

Subjects using an intensive format may be configured in different ways. The extent to which programs of study are “accelerated” or “compressed” varies from subject to subject, and institution to institution. The following configurations have been noted in the literature as being commonly used (Finger & Penney, 2001):

- **Week-long mode:** 5 or 6 consecutive days from 8.30-4.30 pm (Clark & Clark, 2000; Grant, 2001);
- **Two or Three Week-long Mode** (Petrowsky, 1996; van Scyoc & Gleason, 1993);
- **Weekend mode:** e.g., weekends either during the length of semester (e.g., in weeks 3, 6 and 9) or condensed into one half or one third of the semester;
- **Weekend and evening mode:** a mixture of weekends and allocated evening classes;
- **Other modes:** 3 hours per day for 18 days (Gose, 1995); weekly classes of 3 hours (Henebry, 1997); 4 hours per week for 5-10 weeks (Jonas et al., 2004).

### The Use of Intensive Teaching Formats

The Faculty of Economics & Commerce already uses intensive teaching, **and** a number of Faculty members have experience of intensive formats inside and outside the Faculty. For example, Finance offers “half” subjects (6.25 credits/18 hours) in the Masters of Applied Finance in day-long blocks spread over three weeks. The Department of Management offers 325-669 (*Perspectives on Managing Change*), which is taught in two or one day blocks spread over 5 weeks and 325-691 (*Managing Across Borders*) was recently been approved by Academic Board to be taught in a mixture of three and six hour classes over 17 days. One of ABIS subjects involves **full day moot court sessions (plural?)**. Members of ABIS have experience of teaching 5 consecutive days for MUP, as well as a mixture of formats for other institutions.<sup>4</sup> Economics

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<sup>1</sup> The Working Group was set up by Associate Dean Greg Whitwell to provide the following in regard to postgraduate students; (a) an overview of the results of research on intensive teaching regarding its advantages and disadvantages; (b) insights into effective intensive teaching based on research, other universities and/or the Faculty's experience of intensive teaching (c) relevant recommendations. The Working Group consisted of Cynthia Hardy (Chair), Martin Davies (TLU) and Gabriele Lakomski (Faculty of Education). This report is based on research conducted by Martin Davies (TLU) and by Zelinna Pablo (Department of Management).

<sup>2</sup> For this reason, we confine our study to research on the tertiary sector.

<sup>3</sup> Accelerated teaching is often used to denote fewer contact hours (Scott & Conrad, 1992; Wodkowski, 2003) and is not considered here. Flexible modes of delivery involve an electronic delivery component and are also not considered here although members of the Faculty have experience with them (e.g., Dowling, Godfrey & Gyles, 2003).

<sup>4</sup> These include: 2 days then a break and then 3 days; flexible delivery with web-based interaction; one week teaching followed by a 2 week break and then one week teaching; five consecutive days.

does not offer intensive teaching in its Masters subjects but members of this Department have had experience of different intensive teaching formats with MUP and ANZSOG. Finally, Melbourne's Summer Session is intensive in so far as it is taught over 6 instead of 12 weeks.

Intensive teaching is used elsewhere in the University. For example, the Masters in Knowledge Management offered by the Faculty of Education offers at least six of its subjects in intensive format – day-long blocks (Saturdays and Sundays) spread over a number of weeks (<http://www.edfac.unimelb.edu.au/courses/postgraduate/Courses/knowledgeManagement.shtml>). The Department of Information Systems offers day-long blocks spread over the semester. The Australia New Zealand School of Government (<http://www.anzsog.edu.au>), for which students receive a Melbourne Masters degree) offers its core subjects intensively over 5 consecutive days, as well as day long blocks spread over a number of weeks.

Statistics indicate that there are now more than 320 U.S institutions that practice accelerated learning.<sup>5</sup> Many leading research institutions in the UK and Canada also use a range of intensive formats to teach business students.<sup>6</sup> In Australia, intensive teaching has been used by most business schools for local as well as offshore programs, and the Macquarie Graduate School of Management started using intensive teaching formats as early as 1991 (Burton & Nesbit, 2002). It appears that intensive teaching formats are now a widely used, alternative way of delivering high quality learning (Daniel, 2000).

### **Empirical Research on the Outcomes of Intensive Teaching Formats**

Research in this area is not extensive (Burton & Nesbit, 2002). The research that does exist is frequently in the form of doctoral dissertations, faculty reports, conference proceedings, and unpublished papers – not top-tier research journals. Much of the research emanates from the non-tertiary sector and, where tertiary education is discussed, the research is mainly in disciplines other than Economics and Commerce.<sup>7</sup> While the research generally reports positive results associated with intensive teaching formats, it has failed to establish a convincing causal link between time duration/mode of delivery and learning outcomes as evidence on the relationship between time and learning is far from conclusive (Karweit, 1984; Wlodkowski, 2003).

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<sup>5</sup> The Centre for the Study of Accelerated Learning (CSAL) has a comprehensive website listing all U.S institutions that practice intensive teaching format teaching available at: <http://www.regis.edu/regis.asp?sctn=rsr&p1=csal>. This institution is part of a wider organisation: The Commission for Accelerated Programs (CAP): <http://www.capnetwork.org/>. C.A.P has a range of research papers and documents pertaining to accelerated learning. Note that there are access restrictions to the published data on these websites and not all research is publicly available. The Director of this Unit indicated that “best practice” and benchmarking arrangements are not available at present: ‘because the field is so new we’re not sure what the best practices would be’ (Wlodkowski, per. comm. to Martin Davies 24/2/05).

<sup>6</sup> For example, McGill University offers the International Masters in Practicing Management (IMPM), designed by Henry Mintzberg, with 11-day modules as a core feature. McGill also offers an intensive format in their MBA Japan program for subjects ranging from management to finance and accounting. Warwick Business School regularly teaches intensive modules, usually of one week duration dedicated to one or two topics for students in the MBA, as well as specialist Masters degrees. Other UK universities that use intensive teaching include London Business School, Nottingham University, Manchester Business School, Aston University, Imperial, and Said Business School.

<sup>7</sup> Burton & Nesbit (2002); Henebry (1997); Jonas, Weimer, & Herzer (2004); Petrowsky (1996); van Scyoc & Gleason (1993) do consider Economics & Commerce.

Educational specialists consulted at Melbourne<sup>8</sup> indicated that, in their opinion, a clear link was unlikely to be established, given the complexity of successful teaching, the number of factors that are associated with success, and the difficulties of establishing control groups.<sup>9</sup>

The research that does exist tends to demonstrate learning outcomes from intensive teaching formats that are either indistinguishable from or better than those associated with traditional formats (Daniel, 2000; Finger and Penny, 2001; Grant, 2001; Henebry, 1997; Kasworm, 2001; Scott, 1994; Scott & Conrad, 1991; Wlodkowski, Maudlin, & Iturralde-Albert, 2000; Wlodkowski & Westover, 1999). It appears that the time taken to complete a subject is *not* the principal driving force regarding learning when time is isolated as a variable (Kasworm, 2001). Certainly, it seems that longer is not necessarily better when it comes to the relative effectiveness of intensive vs. traditional teaching formats. Wlodkowski (2003) notes that the length and duration of traditional subjects in higher education varies considerably in different institutions (e.g., 10, 12, 13, or 16 semesters or terms with one or two classes each week that may run for one hour, one and a half hours, three hours or four hours); and institutions have adopted particular traditional formats based on intuition or national norms, rather than scientific study. The factors determining student learning are wide-ranging, and include the level of student motivation, the expertise of the instructors and the competence of the students themselves, as well as the relevance of the learning material to students' lives, instructor enthusiasm and expertise, classroom interaction, collegial atmosphere, student input into class discussions, active learning, a relaxed learning environment, well planned, organized and structured activities, the use of different teaching strategies, a focus on learning objectives, and accurate assessment (Conrad, 1996; Daniel, 2000; Wlodkowski, 2003).

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<sup>8</sup> Richard James, Acting Director of the Centre for the Study of Higher Education and Gabriele Lakowski, Professor in the Faculty of Education, who is a member of the Working Group.

<sup>9</sup> The studies that have attempted to assess differences in learning outcomes by comparing intensive teaching and traditional teaching formats are problematic for several reasons. First, very little published literature is available on the impact of intensive teaching formats on postgraduate student learning outcomes (most of it is at undergraduate/college level, or even younger), although it has been noted that students completing intensive teaching formats tend to be older (Caskey, 1994), more motivated (Christy, 1991) and better prepared (Smith, 1988), and thus, more likely to succeed regardless of the time-format. Second, there is very little Australian data. Most of it emanates from the U.S which has a rather different academic system. Finger and Penney's (2001) and Burton and Nesbitt's (2002) papers are exceptions to this. Third, there is very little research on intensive teaching formats in the Economics and Commerce field (Burton & Nesbit, 2002; Grant, 2001; Henebry, 1997; Jonas et al., 2004; Petrowsky, 1996). Research in other fields may or may not translate well into the domain of Commerce. Finally, there are methodological problems with the research. For example, ratings of student evaluation are to some degree biased. Intensive teaching programs are usually self-selected by students. None of the studies comparing intensive and traditional teaching randomly assigned students to subjects (Daniel, 2000). The self-selection of the teaching format cannot reliably be separated from the evaluation given *about* the teaching format by students. Students also may select the teaching format that suits their learning style, giving an inaccurate assessment of the benefits of intensive teaching formats (Burton & Nesbit, 2002). It is not clear what the studies are measuring, and whether this is a long-term outcome of the teaching method used. Data is generally taken immediately after a period of intensive teaching ends. This may or may not accurately reflect the long-term learning outcomes achieved (Daniel, 2000). The student cohorts being measured are not always identical (Wlodkowski, 2003). Reliability and validity of the tests are also a matter of concern. Post-tests given at the end of a semester-length subject requires a longer retention period than a post-test administered after a two-week intensive teaching subject (Daniel, 2000). The studies comparing academic performance also compare semester-length subjects with a range of different intensive teaching formats: two weeks (Petrowsky, 1996), three weeks (van Scyoc & Gleason, 1993); 2-15 weeks (Lombardi, Meikamp, & Weinke, 1992); 5- 10 weeks (Kanun, Ziebarth, & Abrahams, 1963); 9- 18 weeks (Waechter, 1967).

To conclude, time alone does appear to be either the key or the barrier to effective teaching and it seems that *any* form of teaching – whether traditional or intensive – is associated with particular advantages and disadvantages, the latter of which should factor into subject planning and design.

### **Advantages and Disadvantages of Intensive Teaching Formats**

The Working Group has identified some advantages and disadvantages of intensive teaching formats based on the research, as well as the experiences of instructors in the Faculty, University and other institutions. Advantages are both pedagogical and logistical and accrue to both student and instructor. They revolve around increased motivation, commitment, and concentration, diversity of teaching methods, stimulation and enthusiasm, stronger relations among students, and flexibility. Considerations that instructors need to take into account when engaging in intensive teaching include the greater intensity of workload and fatigue; insufficient time for reflection and analysis of the material being taught. (Traub, 1997; Wolfe, 1998); cramming by students (Shafer, 1995); curtailed content and superficial content coverage (Wlodkowski, 2003). Please see Table 1 (p. 7) for more details of advantages, disadvantages and potential solutions.

Intensive teaching offers important opportunities for pedagogical development and diversity. Particular issues can be examined and analysed using a variety of theories in an integrated way and themes can be developed which are “unpacked” during the course of a day or series of days to provide a deeper understanding. For example, an issue can be examined through a combination of theory/lecture, case study, plenary discussion, small group/syndicate discussion, role-playing, in-class surveys, simulations and other experiential methods in a way that is impossible in a 3-hour class. It is also possible to do multi-day cases where students re-visit the same case from different angles, as well as have other activities that stretch over multiple days (broken up by other activities). The diversity of pedagogical approaches with the appropriate pacing and activities allows motivation and attention to be sustained, while instructors can consider material in much more depth by being able to focus on a case or problem in a concentrated manner and by using different perspectives and techniques. In addition, bringing students together in a shorter, more intensive way helps them to form strong bonds that enhance the learning process and, in the case of week-long formats, the evenings can be used for guest speakers and team-based exercises. As such, intensive teaching formats can offer considerable pedagogical and learning advantages and opportunities compared to traditional 3-hour classes (especially those held in the evening when fatigue is a problem for staff and students).

There are, however, different views and experiences concerning the *type* of intensive teaching format. Faculty members were, generally speaking, more comfortable with the idea of one or two-day classes spread over a period of at least 5 or 6 weeks, rather than condensed into one week. The longer format seems to capture most of the advantages while minimizing many of the disadvantages, leading to a great deal of satisfaction on the part of Faculty members who had used it. It provides sufficient time for reading (and students receive the same materials as traditional classes), maturation and assessment. More compressed formats in terms of duration (e.g., one week intensive subjects) clearly pose more challenges and some individuals felt they had been effective because students had not had enough time to reflect and absorb the material. On the other hand, this format has have been used successfully elsewhere. Informal feedback from a group of ANZSOG students indicated they felt they learned a considerable amount from 5-day intensive sessions. These more compressed formats also provide the opportunity for

leading educators and researchers from overseas to teach subjects which, in turn, can lead to important benefits for students. They may also be appropriate for particular subjects that lend themselves to experiential learning; subjects taught by instructors experienced in intensive teaching; and subjects targeted at more experienced students. The focused nature of such teaching, coupled with multiple methods, may provide the learning role that reflection does in the case of more traditional formats.

### **Recommendations**

There is nothing in the research to indicate that intensive teaching need not be a successful and effective mode of delivery, **resulting in?** considerable advantages for students when used by effective teachers in appropriate subjects. Members of the Faculty and the University have had considerable success with intensive teaching here and elsewhere, and Academic Board has indicated that it will continue to approve requests for intensive teaching as there are precedents elsewhere in the University. Innovating and developing different pedagogical approaches is an important part of the professional development of Faculty members, particularly in some disciplines where academics are expected to be expert in a range of different delivery modes. Such innovation is also important in terms of ensuring the Faculty's teaching and learning skills are of an international standard. Institutions around the world are using a range of different modes of delivery and the Faculty's Operating Plan (p. 9) requires us to "regularly review the educational objectives, pedagogy and modes of delivery of all undergraduate and postgraduate programs to ensure that teaching and learning is informed by the highest international standards of curriculum design, pedagogy, modes of delivery." The Faculty has already successfully innovated with a wide range of pedagogical developments such as web-based learning and multi-media innovations, and intensive teaching should be considered in a similar light to ensure that we do not lag behind. Furthermore, intensive teaching can play an important strategic role for the Faculty. The Faculty's Operating Plan (p. 3) indicates that "growth in enrolments will be predominantly in Masters by coursework programs. This will require us to expand the student base and to consider different types of student. If we are to attract experienced students in full time work, we will need to consider different modes of delivery in order to offer the most up-to-date pedagogical experience for fee paying students.

**The Working Group notes that the Faculty already offers subjects delivered in intensive formats and recommends that it should continue to do so. It also recommends that, subject to satisfactory proposals from qualified instructors, additional subjects should be considered for delivery in intensive formats.**

**The Working Group recommends that any subject taught in intensive format should consist of the same contact hours as other 12.5 credit subjects (or the equivalent in the case of "half" subjects taught in the MAF).**

**The Working Group does not recommend that any individual should be *required* to deliver a subject in intensive format.** Intensive teaching does not work for all subjects or all instructors and the best way to develop **quality** intensive teaching is through "bottom up" initiatives based on academic expertise and professional judgments rather than "top down" impositions, subject to the normal Faculty and University academic approval processes. Moreover, when particular instructors are not available to teach intensive subjects (e.g., because of study leave), department

heads should take the appropriate steps to find other qualified teachers or consider reverting to the traditional format. Inexperienced lecturers wishing to consider intensive teaching formats should consider taking subjects offered by CSHE to enhance their teaching repertoires and skills.

**The Working Group recommends that different types or configurations of intensive teaching formats should be considered on their own merits on a case by case basis.** It notes that day-long blocks spread out over a number of weeks appear to have considerable advantages and relatively few disadvantages and, when compared to the alternative of three-hour evening classes, may be a preferable mode of delivery for both pedagogical and logistic reasons. It acknowledges that more compressed configurations, especially the one week configuration, present greater challenges and may be suitable for fewer subjects. But it would not want to rule out the consideration of shorter formats since there is no research to suggest they cannot be used effectively under the right circumstances; they have been used successfully elsewhere; and Academic Board has recently approved at least one subject of a relatively short duration.<sup>10</sup>

**The Working Group recommends that Graduate Studies Committee take the following issues into account when considering intensive teaching proposals:**

- Does the proposal for intensive teaching satisfactorily explain how the subject matter will be incorporated into an intensive teaching format?
- Does the proposal satisfactorily explain how the instructor's expertise and experience is suitable for intensive teaching?
- Does the proposal satisfactorily explain how assessment will be incorporated into the intensive teaching format?
- Does the proposal satisfactorily explain how the intensive teaching format will benefit students?
- Does the proposal satisfactorily explain how any disadvantages associated with the intensive teaching format will be addressed?

**The Working Group recommends that the Faculty take a coordinated approach to intensive teaching,** in the following ways.

- The Faculty should ensure that intensive teaching timetables are coordinated appropriately to ensure they do not clash with each other or occur at periods of the year when students are overloaded with other work (e.g., close to exams).
- The Faculty should take active steps to explore ways to encourage teaching at the weekends and ensuring access to buildings and other facilities.
- Department heads should ensure that proposals for intensive teaching are circulated to all staff in their departments to increase coordination.
- Department heads should recognize that staff members who engage in weekend teaching may wish to take time off in lieu during the week.

**The Working Group recommends that the Faculty take a strategic approach to intensive teaching** and consider the role that it can play in supporting new graduate coursework programs and/or attracting students with particular profiles (e.g., experienced, in full-time work).

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<sup>10</sup> Academic Board recently approved a Management subject to be taught intensively over a 17 day period and the Faculty's "shepherd" on Academic Board indicated that he teaches a 5-day intensive subject at a UK institution.

	<b>ADVANTANGES OF INTENSIVE TEACHING FORMATS</b>	<b>ISSUES FOR CONSIDERATION UNDER INTENSIVE TEACHING FORMATS</b>	<b>POTENTIAL SOLUTIONS</b>
Preparation and management	<ul style="list-style-type: none"> <li>• Tendency of students to prepare better, assuming they get their materials early</li> <li>• Improvement in time management skills</li> </ul>	<ul style="list-style-type: none"> <li>• Need for students to move on to new material without having time to reread or review</li> <li>• Interference with assignment completion</li> <li>• Increased likelihood of instructors covering less material</li> </ul>	<ul style="list-style-type: none"> <li>• Provide early access to material</li> <li>• Require advanced reading</li> <li>• Use in-class assignments</li> <li>• Schedule assignments after classes end</li> <li>• Be careful about choice of material</li> <li>• Provide fewer but deeper topics</li> </ul>
Student attitudes and preferences	<ul style="list-style-type: none"> <li>• Increased motivation, commitment, engagement, stimulation, enjoyment and satisfaction reported</li> <li>• Greater student preference (or at least equal preference) for intensive sessions reported</li> <li>• Better attendance encouraged</li> <li>• Increased student concentration achieved</li> <li>• Increased convenience as perceived by students</li> <li>• Learning experience reported to be more intensive, efficient, integrated, and challenging</li> <li>• More interaction</li> <li>• Closer relationships among students; students enjoyed each others' company more and were willing to debate/ discuss during breaks</li> <li>• Intense working relationships between instructors and students</li> </ul>	<ul style="list-style-type: none"> <li>• Information overload</li> <li>• Difficulty in achieving (sustained) concentration</li> <li>• Over-stimulation and strain, if not for the employment of certain strategies</li> <li>• Increased sensitivity to volume of work and time constraints</li> <li>• Less opportunities to see instructor outside of class and to review material in preparation for the next lecture</li> </ul>	<ul style="list-style-type: none"> <li>• Plan schedule carefully</li> <li>• Choose and schedule student assessment carefully</li> <li>• Diversify teaching methods e.g., in-depth group discussions, individual and small group projects, case studies, experiential learning, role plays, simulations, interactive exercises, etc.</li> <li>• Use students' experiences as part of the classroom discussion</li> <li>• Make instruction more process-oriented and use a more facilitative instructional style</li> <li>• Use student appointments, review sessions or email communication to complement in-class feedback</li> <li>• Use breaks during class to deal with some issues (in week-long intensive teaching, evenings can be used)</li> </ul>
Learning process	<ul style="list-style-type: none"> <li>• Allows for greater diversity in instructional methods</li> <li>• Provides a learning context that can have high focus and impact</li> <li>• Can present a better-quality learning experience than regular classes, under certain conditions (e.g., variety in methods)</li> <li>• Instructional time and flexibility of use increases</li> </ul>	<ul style="list-style-type: none"> <li>• Need for expertise on the part of instructor to modify and vary instructional approaches to maximize learning</li> </ul>	<ul style="list-style-type: none"> <li>• Use experienced teachers</li> <li>• Ensure teachers receive adequate training</li> <li>• Share best practice about most effective configurations and practices, as well as types of subjects that work best in intensive format.</li> </ul>

<p>Instructor attitudes</p>	<ul style="list-style-type: none"> <li>• High degrees of (greater) personal satisfaction and enjoyment reported by instructors</li> <li>• Appreciation of smaller classes, increased student-faculty interaction, curricular flexibility, comradeship</li> <li>• Support for intensive formats from majority of faculty reported</li> <li>• Factors like content, objectives, methodology perceived to be the same, better, or much better than in traditional formats</li> <li>• Opportunity to revisit issues from different angles and go into more depth</li> <li>• Perception that it accommodates the needs of (working) students</li> <li>• Perception that it increases student motivation</li> <li>• Perception of greater integration, intensity, concentration, continuity, and merging of theory and practice</li> <li>• Teaching time compressed, allowing for work-life balance</li> <li>• Professional development of staff as they learn new and varied teaching methods</li> </ul>	<ul style="list-style-type: none"> <li>• Some instructors perceive decreased opportunity for extensive coverage; too rapid assimilation by students; lack of time to digest concepts</li> <li>• Some instructors perceive fatigue on the part of the students (although fatigue is also a factor in traditional evening classes)</li> <li>• Some instructors prefer traditional time frames</li> <li>• Some instructors perceive excessive or increased preparation time and work load and intensity of teaching time</li> <li>• Some instructors perceive difficulty in maintaining energy</li> <li>• Subjects designed under traditional formats are not necessarily readily adaptable to intensive formats</li> <li>• Little opportunity to respond to students' feedback on the course and to adjust during intensive teaching period</li> <li>• Timely feedback on student performance still expected during intensive teaching periods</li> <li>• Heavy workloads during the period of intensive teaching, especially with weekend teaching</li> </ul>	<ul style="list-style-type: none"> <li>• Instructor makes choice of whether to offer a subject intensively or in traditional format – should not be imposed on instructors or subjects</li> <li>• Diversify teaching methods e.g., in-depth group discussions, individual and small group projects, case studies, experiential learning, role plays, simulations, interactive exercises, etc.</li> <li>• Use students' experiences as part of the classroom discussion</li> <li>• Make instruction more process-oriented and use a more facilitative instructional style</li> <li>• Schedule activities to vary pace and provide short breaks during classes</li> <li>• Redesign traditional subject specifically for intensive teaching</li> <li>• Plan class schedule and assignments</li> <li>• Use student appointments, review sessions or email communication to complement in-class feedback</li> <li>• Use breaks during class to deal with some issues (in week-long intensive teaching, evenings can be used)</li> <li>• Distribute instructor's intensive teaching in a way that results in a sustainable workload</li> <li>• Allow instructors time off in lieu of weekend teaching</li> </ul>
<p>Class type/ student type</p>	<ul style="list-style-type: none"> <li>• Preferred by certain students e.g working, travelling, those who have tried it before, those whose learning style is experiential.</li> <li>• Preferred by students in certain subjects eg., social science, arts, sciences, maths and vocational/skill-based subjects</li> <li>• Works better in smaller classes of up to 15-20 (but so do traditional formats and intensive teaching has been successfully used with classes of 40-50 as long as facilities (e.g., breakout rooms) are available</li> </ul>	<ul style="list-style-type: none"> <li>• Some students taking intensive quantitative subjects prefer traditional formats</li> <li>• Intensive formats rated lower, or traditional formats preferred, by certain groups (full-time, those with higher GPAs)</li> <li>• Raises concern in students who have not experienced the format, or in students concerned about particular courses (quantitative, new, difficult subjects)</li> </ul>	<ul style="list-style-type: none"> <li>• Explain how the intensive teaching format work to students unfamiliar with it</li> <li>• Identify specific concerns and provide measures to address them</li> <li>• Avoid use of intensive teaching in subjects where it's difficult to use different teaching approaches</li> </ul>

## Reference List

- Austen, T. L., Fennell, R. R., & Yeager, C. R. (1988). Class scheduling and academic achievement in a non-traditional graduate program. *Innovative Higher Education*, 12(2), 79-90.
- Beattie, K., & James, R. (1997). Flexible coursework delivery to Australian postgraduates: How effective is the teaching and learning? *Higher Education*, 33(2), 177 - 194.
- Bester, J. F. (1965). Student performance in summer programs. *American Journal of Pharmaceutical Education*, February, 44-49.
- Boddy, G. W. (1985). Regular vs. Compressed semester: A comparison of effectiveness for teaching in higher education. *Dissertation Abstracts International*, 47(1A), 65.
- Brackenbury, R. L. (1978). What is more elusive than the learning of philosophy? *ERQ*, Summer, 93-96.
- Burton, S., & Nesbit, P. (2002, November). *An analysis of student and faculty attitudes to intensive teaching*. Paper presented at the Celebrating Teaching and Macquarie, Macquarie University.
- Caskey, S. (1994). Learning outcomes in intensive courses. *Journal of Continuing Higher Education*, 42, 23-27.
- Cawelti, G. (1994). *High school restructuring: A national study*. Arlington, V. A.: Educational Research Service.
- Christy, D. F. (1991). *Motivation of intensive English program participants: A factor analytical exploration*. Dissertation Abstracts International 54, 782.
- Clark, E., & Clark, P. (2000). Taking the educational show on the road: The promises and pitfalls of intensive teaching in offshore postgraduate coursework programs. *International Education*, 4(1).
- Conrad, P. A. (1996). Attributes of high-quality intensive course learning experiences: Students' voices and experiences. *College Student Journal*, 30, 69-77.
- Daniel, E. L. (2000). A review of time-shortened courses across disciplines. *College Student Journal*, 34(298-308).
- Deveny, J., & Bookout, J. (1976). The intensive language course: Towards a successful approach. *Foreign Language Annals*, 9, 58-63.
- Dowling, C., Godfrey, J.M. & Gyles, N. (2003). Do hybrid flexible delivery teaching methods improve account students' learning outcomes. *Accounting Education*, 12(4): 373-391.
- Eller, K. (1983). Developing a summer intensive course at a commuter campus. *Foreign Language Annals*, 16(3), 225-234.
- Finger, G., & Penney, A. (2001). *Investigating modes of delivery in teacher education: A review of modes of delivery*. Paper presented at the Annual Conference of the Australian Association for Research in Education, Fremantle, Western Australia.
- Frank, T. (1973). A practical approach to intensive German. *Unterrichtspraxis*, 6(1), 5-8.
- Gaubatz, N. (2003). Course scheduling formats and their impact on student learning. *The National Teaching and Learning Forum*, 12(1).
- Gleason, J. (1986). *Economic models of time in learning*. Unpublished PhD, University of Nebraska.
- Gose, B. (1995). One-course-at-a-time "block plan" re-examined by college that adopted it 25 years ago. *The Chronicle of Higher Education*, 41(47), A28.

- Grant, D. B. (2001). Using block courses for teaching logistics. *International Journal of Physical Distribution and Logistics Management*, 31(7/8), 574-584.
- Haney, J. (1985). *A comparative study of modular and semester schedules*. Unpublished PhD, Mississippi State University.
- Henebry, K. (1997). The impact of class schedule on student performance in a financial management course. *Journal of Education for Business*, 73(2), 114-120.
- Jonas, P. M., Weimer, D., & Herzer, K. (2004). Comparison of traditional and nontraditional undergraduate business degree programs - adult education. *Journal of Instructional Psychology*, 28(3), 161-168.
- Kanun, C., Ziebarth, E. W., & Abrahams, N. (1963). Comparison of student achievement in the summer term and regular quarter. *Journal of Experimental Education*, 32, 123-132.
- Karweit, N. (1984). Time-on-task reconsidered: Synthesis of research on time and learning. *Educational Leadership*, 41, 32-35.
- Kasworm, C. (2001). *Adult learner experiences of an accelerated degree program*. Paper presented at the Adult Education Research Conference, Michigan State University. Retrieved 14/12/04. (URL: <http://www.edst.educ.ubc.ca/aerc/2001/2001kasworm.html>)
- Keilstrup, D. (1981). Practical guidelines and activities for an advanced foreign language intensive program. *Modern Language Journal*, 65, 377-382.
- Kirby-Smith, J. (1987). *Effects of intensive college courses on student cognitive development, academic standards, student attitudes and faculty attitudes*. Unpublished PhD, University of Southern California.
- Kuhns, E. (1974). The modular calendar: Catalyst for change. *Educational Record*, 55(1), 59-64.
- Lombardi, T., Meikamp, J., & Weinke, W. (1992). Learning gains and course time format in special education. *Educational Research Quarterly*, 15, 33-38.
- Masat, F. (1982). An immersion course in basic. *Journal of Educational Technology Systems*, 10(4), 321-329.
- Petrowsky, M. C. (1996). The two-week summer microeconomics course: Success or failure? *ERIC Document Reproduction Service, ED 396779*.
- Ratey, J. J. (2001). *A user's guide to the brain: Perception, attention and the four theatres of the brain*. New York: Pantheon.
- Richey, R., Sinks, R., & Chase, C. (1965). A comparison of the academic achievement of students enrolled in the same courses in the spring semester of 1962-1963: Office of the Summer Sessions, Indiana University, Bloomington.
- Scott, P. A. (1994). *A comparative study of students' learning experiences in intensive and semester-length courses and the attributes of high-quality intensive and semester course learning experiences*. Paper presented at the Meeting of the North American Association of Summer Sessions, Portland.
- Scott, P. A., & Conrad, C. F. (1991). A critique of intensive courses and an agenda for research. *Higher Education: Handbook of Theory and Research*, 8(411-459).
- Scott, P. A., & Conrad, C. F. (1992). A critique of intensive courses and an agenda for research. *Higher Education: Handbook of Theory and Research*, 8(411-459).
- Shafer, D. W. (1995). *A qualitative study of adult and traditional college students' perceptions of a compressed and traditional length college course*. Unpublished PhD, Boston University.
- Shapiro, E. (1988). Effects of intensive vs. Traditional time formats in ipcd classes: Institute for Personal and Career Development, Central Michigan University.

- Smith, J. P. (1988). *Effects of intensive college sources on student cognitive achievement, academic standards, student attitudes, and faculty attitudes*. University of Southern California.
- Traub, J. (1997). Drive-thru u: Higher education for people who mean business. *New Yorker*, October, 114-123.
- Troiani, E. (1986). *10 days or 10 weeks: Immersion programs that work*. Paper presented at the Annual Meeting of the Central States Conference on the Teaching of Foreign Languages, Milwaukee.
- van Scyoc, L., & Gleason, J. (1993). Traditional or intensive course lengths? A comparison of outcomes in economics learning. *Journal of Economics Education*, 24, 15-22.
- Waechter, R. F. (1967). *A comparison of achievement and retention by college students in an earth science course after learning under massed and spaced conditions*. Pennsylvania State University.
- Walberg, H. J. (1988). Synthesis of research on time and learning. *Educational Leadership*, 45, 76-85.
- Wlodkowski, R. J. (1999). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults*. San Francisco: Jossey-Bass.
- Wlodkowski, R. J. (2003). Accelerated learning in colleges and universities. In R. J. Wlodkowski & C. Kasworm (Eds.), *Accelerated learning for adults: The promise and practice of intensive educational formats* (Vol. 97, pp. 5-15).
- Wlodkowski, R. J., & Kasworm, C. (2003). Accelerated learning: Future roles and influences. In *Accelerated learning for adults: The promise and practice of intensive educational formats* (Vol. 97, pp. 93-98). San Francisco: Jossey-Bass.
- Wlodkowski, R. J., Maudlin, J. E., & Iturralde-Albert, L. (2000). *Report on accelerated learning project: Phase 4*. Denver: Center for the Study of Accelerated Learning, Regis University.
- Wlodkowski, R. J., & Westover, T. (1999). Accelerated courses as a learning format for adults. *Canadian Journal for the Study of Adult Education*, 13(1), 1-20.
- Wodkowski, R. J. (2003). Accelerated learning in colleges and universities. *New Directions for Adult and Continuing Education*, 97(Spring), 5-15.
- Wolfe, A. (1998). How a for-profit university can be invaluable to the traditional liberal arts. *Chronicle of Higher Education*, December(4), B4-B5.