

Accelerated Learning Formats in Teacher Education Programs

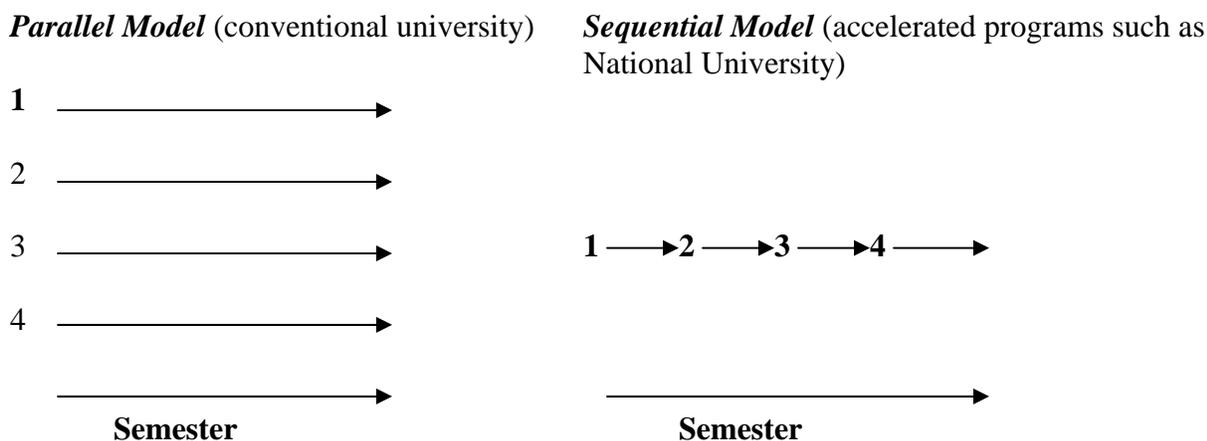
Introduction

Teacher retention is a critical issue in education world wide. As baby boomers retire, U.S. school enrollment is projected to increase by one million children in the next ten years and 50,000 additional teachers will be needed to fill the gap (USCE, 1999). Because teacher education programs in traditional universities cannot guarantee the availability of necessary classes, students desiring a teaching credential experience frustration, anticipating a longer time frame for credential completion and entrance into the classroom. There has been growing interest in the benefits of accelerated programs to meet this need, and nontraditional students (adult learners) are entering them in large numbers.

Such working adults comprise 39% of undergraduate students in the U.S., and higher education has been shifting to new ways to meet their needs. These learners are very practical. They have limited time for study and need more flexibility and convenience than do traditional students. Over 250 U.S. colleges and universities currently offer such accelerated programs, and it is projected that 25 percent or more of all adult students will be enrolled in accelerated programs within the next ten years. The National Center for Educational Statistics (2001) reported that 41 percent of students enrolled in degree-granting institutions in 1998 were adults: six million students 25 and older. Accelerated learning is being looked at worldwide as a possible vehicle for educating more of the population in less time. According to Wlodkowski & Kasworm, (2003), “There is evidence that accelerated learning programs are more effective with nontraditional learners. . . and have similar or better learning outcomes [than are traditional learning formats].”

What Are Accelerated Courses and Programs?

These programs are structured to take less time than conventional programs to attain a degree or credential. Accelerated courses are taught sequentially (one at a time) rather than in the traditional parallel fashion in which several classes are taken at once. Rather than splitting one's focus between several subjects for one semester, the student focuses on one subject at a time with deeper concentration. Figure 1 illustrates the comparison:



Most traditional universities use a parallel style format while universities that have accelerated programs such as National University use this sequential model for all programs. Greiner et al. (2005) and Serdyukov (2005) would argue that such a sequential model meets the needs of adult learners better than the traditional parallel model since it seems to reduce the number of distractions in students' lives so that they can give more focused attention to one subject. Students have shared that this "one class at a time" structure allows them to focus all their attention and energy on one subject and that the learning tends to be deeper. This kind of focus is echoed in Csikszentmihalyi's research (1982) that suggested such "deep concentration"

and “undivided intentionality” more successfully nourish and strengthen the self and provide “optimal experiences.”

In the sequential accelerated model, each class builds on the previous content. Accelerated learning requires the same number of class hours as a conventional format, but these hours are compressed into fewer weeks. These accelerated courses have five common characteristics (Serdyukov, 2004): “short duration, more frequent and lengthier lessons, compressed learning information, efficient activities, and intense learning processes.” Evidence suggests that such accelerated learning programs are very effective with nontraditional learners, operate at lower costs, and have outcomes that are comparable (and often superior) to traditional university formats (Wlodkowski & Kasworm, 2003).

Who Are These Students?

“The typical adult student in an accelerated program is a thirty-six-year-old white woman who is married, working full time outside the home, and with more than fifteen years of work experience” (Wlodkowski, Mauldin, and Gahn, 2001; Wlodkowski and Westover, 1999). They have limited time for study and need more flexibility and convenience than do traditional students (Wlodekowski, 2003). Most nontraditional students work more than 20 hours a week and have families. They cannot do college living in a dorm! Adult learners “tend to prefer single-concept, single-theory courses that focus heavily on the application of the concept to relevant problems” (Zemke, 1981, p. 609). They are very efficiency-minded asking “What is the cheapest, easiest, fastest way to learn to do that?” These are older working adults who “list such convenience variables as schedule, location, and time to degree as significant factors in their choice of an institution” (Aslanian, 2001).

Why Do Students Choose Accelerated Classes/Programs? What Are the Benefits?

These are working adults who value a program that can be finished in a shorter time. They are older than traditional college students and are trying to balance their work life, home life, and school. Time is precious for these adult learners and a shorter, compressed schedule of courses is appealing. Time is the first important reason students choose an accelerated format. Convenience of learning is another. The classes are scheduled far ahead and the student sees each month's course completion as a step to his or her goal. According to Serdyukov (2005), the benefits of accelerated learning are as follows: they

- Enhance students' learning and development by keeping them focuses on the given subject matter and learning
- Allow students to achieve their goals faster through condenses short-duration courses
- Allow compression of the overall time of instructional time while increasing productivity of learning providing comparable or superior outcomes
- Offer a flexible accommodation to the needs and conditions of working adults making learning more convenient
- Increase accessibility, flexibility, and convenience of learning raise the quality of education, and generally boost students' satisfaction.

What Are the Criticisms of Accelerated Learning Formats? Why is Compressed Learning Controversial?

Such compression of classes is thought by some to lead to weaker learning outcomes, and that the crammed curriculum does not allow adequate time for reflection and deep learning.

Critics propose that the quality of learning is a function of hours in the classroom. The longer the class, the more content will be covered. In a comprehensive review of 100 articles, however, Scott & Conrad (1991) concluded that outcomes from compressed courses equal (and sometimes surpass) outcomes from traditional course formats. In comparative courses such as law, computer science, and business administration, the outcomes showed either no significant difference between traditional formats and compressed formats, or that outcomes of compressed learning were stronger. The researchers added that “students were often motivated, excited, and inspired by intensive course experiences and that concentrated learning generated a level of satisfaction unlike that experienced in traditional-length courses (p. 444).”

Superior academic achievement by older adults in accelerated programs has been thoroughly documented. In the Seamon study (2004), for example, two educational psychology classes were compared—one a semester long class and one an intensive format. “Students in the intensive version of the course performed significantly better than students in the semester length course on posttests of content and questions tapping higher-order learning. The two groups did not differ significantly in their affinity for learning..., age or GPA, suggesting the superior performance was the result of the intensive course format and not any pre-existing student characteristics” (Seamon, 2004). When psychology teachers were surveyed on student preference between intensive formats or semester-length courses, they overwhelmingly rated the accelerated classes as more satisfying. Respondents said the interim sessions allowed for more in-depth discussions, group projects, and experimental activities (Allen et al., 1982).

Quality of Accelerated Learning Courses and Accelerated Programs

Wlodkowski (2003) addresses some of the barometers of quality in higher education that have been applied to accelerated learning programs: (1) accreditation, (2) learning, (3) student attitudes, and (4) alumni attitudes.

Accreditation

Regional accrediting bodies such as the Western Association of Schools and Colleges (WASC) are a public indication that a college or university has met acceptable academic standards and has the resources to provide a satisfactory higher education experience. Departments within a school (such as the School of Education) have their own accrediting bodies as well. In California, for example, teacher education programs are evaluated by the California Credentialing of Teacher Education (CCTC). National University is approved by WASC and the credential program is in good standing with CCTC.

Learning

Although there remains the strong notion that learning is less effective when presented in less than the traditional amount of time, results of research do not bear that out. Conversely, researchers found that time studying did not necessarily bring more learning. Other factors that influence learning more than time spent on learning are *student capability*, *quality of instruction*, and *personal motivation* (Wlodkowski, 1999). When recent researchers compared the performance of younger (traditional) students with that of older students taking the same course in an accelerated format, the results indicated no difference in the levels of learning (Wlodkowski and Westover, 1999; Wlodkowski, Iturralde-Albert, and Mauldin, 2000). The following table (from the work of Bowling, Ries, & Ivanitskaya, 2002) compares the results of

traditional and compressed courses. Consistently, the outcomes showed either no statistically significant difference or that compressed classes were stronger.

A Summary of Comparative Research on Traditional and compressed courses: Course Durations Compared and Research Findings

Study	Content	Course Durations Compared	Outcome
SUMMER COURSES			
Austin et al. 1988	Master's level courses in Administration of Justice, Research Methods	1-week; 2 ½ wknd*; 5-wknd; and 5-week classes	NS
Bester, 1965	Pharmacy	6-week and 16-week classes	NS
Boddy, 1985	Computer Science History School Law	8 and 16-week classes 8 and 16 week classes 5 and 16-week classes	C NS NS
Deveny and Bookout, 1976	Spanish	8-week class	C
Eller, 1983	Spanish	8-week class	C
Gaston, 1974	French	12-week and 2 quarter classes	C
Gleason, 1986	Economics; Macroeconomics	3-, 5-, and 15 week classes	NS/C
Kanun et al., 1963	Higher Education— Psychology, Health, Sociology	5- and 10 week classes	NS
Kanun et al., 1963	Calculus: diff. equations	2 ½, 5-, and 10 week classes	NS
Keilstrup, 1981	German	6-week class	C
Masat, 1982	Computer Science	3-week, 6 week, and semester-length classes	NS
Murphy, 1979	Economics	2-week class	NS

Parlett and King, 1971	Physics, Architecture	4-week and semester-length classes	C
Solecki, 1971	Russian	6-week class	C
Stephens, 1978	French	12-week class	C
Troiani, 1986	Spanish	10-day class	C
INTERIM COURSES			
DuVerlie, 1973	French	Interim class	C
Masat, 1982	Computer Science	3-week, 6-week, and semester-length classes	NS
Richey et al., 1965	English, Geography, Psychology, Sociology, Education, Home Economics, Library Science	13-day and 17-week classes	NS/C/T
Studdard, 1975	Physical Science	3- and 15-week classes	NS
Tyler, 1970	Foreign Languages (general)	4-week class	C
Wallace, 1972	Foreign Languages (general)	2-week class	C
MODULAR COURSES			
Blackburn et al., 1977	*	3-, 7-, and 14-week classes	NSS
Haney, 1985	*	Modular and semester classes	NS
Kuhns, 1974	*	Modular and semester classes	C
Mazanec, 1972	English, speck, algebra, political science	3-, 6-, and 15 week classes	NS/C
Richardson, 1973	German	8-week class	C
Waechter, 1966	Earth Science	9- and 18-week classes	NS

REGULAR TERM COURSES			
Allen, 1974	English	5-and 15-week classes	NS
Brackenbury, 1978	Philosophy	7-, 8-, 15-week, and 4-wkend classes-	NS
Casky, 1994	Accounting and Algebra	Intensive and traditional	NS
Doyle and Sanders (cited in Doyle, 1978)	Geography	3-week, 6-week, and semester-length classes-	NS
Frank, 1973	German	One semester class	C
Geltner and Logan, 2001	*	6-, 8- and 16-week classes	NS/C
Kirby-Smith, 1987	*	“Intensive” and 15-week classes	NS
Knowles, 1972	Public Administration, Research Methods	7-day and 15-week classes	NS
Nixon, 1996	High School business, government, and education, business management	4-day classes and 16-week classes	C
Ray and Kirkpatrick, 1983	Human sexuality; Tested anxiety, knowledge, and attitudes	3-and 15-week classes	C
Van Scyoc and Gleason, 1993	Economics	3-and 14-week courses	C
Wlodkowski and Westover, 1999	Undergraduate courses	5-and 16-week courses	NS
WEEKEND COURSES			
Austin et al., 1988	*	1-week, 5-week, 2 1/2 – wknd, and 5-wknd classes	NS
Berk, 1979	Statistics	8-day class	C
Brackenbury, 1978	Philosophy of education class	7-, 8-, 14-week, and 4-wknd classes	NS

Doyle, 1978	Graduate students in business administration	2-wknd and 4-week classes	NS
Doyle and Yantis, 1977	Psychology	4-wkind and 9-week classes	NS
Lasker et al., 1975	Harvard's graduate school of Education, Human Development	unspecified	NS
Pflanzer and East, 1984	Science; Biology	unspecified	C
Shapiro, 1988	*	2-, 3-, and 9-week and 4-wknd classes	C
Williams, 1992	*	2-wknd, 8-week and 15-week classes	NS

Note:

NS = non-significant differences in outcome

C = findings in favor of compressed courses

T = findings in favor of traditional formats

* Multiple subjects or subject is not specified

Scott (1996) found that accelerated courses provided powerful learning experience when certain attributes were present: *instructor enthusiasm and expertise, active learning, classroom interaction, good course organization, student input, a collegial classroom atmosphere, and a relaxed learning environment.*

Effective Instruction. According to Scott, instructors are most effective when they are (1) enthusiastic about the subject and about teaching; (2) knowledgeable about their discipline; (3) have good communication skills; and (4) are open-minded, creative, and interested in their students' success.

Teaching Methods. The teaching methods that produce the best outcomes in compressed courses include the following: (1) variety (lecture, group activities, etc.); (2) classroom

interaction and student input; (3) emphasis on depth rather than breadth; (4) experiential learning that applies to the real world.

Effective Classroom Environment. An effective classroom environment for a compressed course should (1) encourage close relationships among students; (2) nurture close student-teacher relationships; (3) encourage a relaxed classroom atmosphere; and (4) have a small class size.

In assessing the quality of learning, Swenson (2003) asks two important questions: “At the end of an independent lesson...course, or program” ‘do learners know they should know? Can they do what they should be able to do?’ . . . There should be no differences in expectation regarding quality practices or outcomes.” Learning should become the purpose of education and “formats are judged by how much learning takes place.” (Swenson, p. 86).

Student Attitudes

Like students in traditional programs, adults in accelerated classes evaluate their learning experience as positive (Scott and Conrad, 1992). Kasworm (2001) found that in accelerated programs, students perceived their experience to be “a supportive world defined for adult learners” compared with their previous experience in traditional colleges during their younger days. Kasworm’s study is based on an “exploratory qualitative case study exploring the meanings, perspectives, and experiences of a group of adult learners participating in an accelerated adult degree program.” The students perceived that the program offered them a world of structure: the program was predictable, the courses were taken one at a time, and there was a predictable timeline for finishing. “The accelerated degree program was seen as locking

them into a learning process that held them in place and that pushed them to completion” (Kasworm, 2001, p. 8). She reflects on the perceptions of a typical student who shares:

I know exactly what my class schedule will be from now until the day I graduate. There’s absolutely no question about it. I like to think about it as the closest thing you could come to education, without having to think. You do have to think very hard for class, but you don’t have to think of anything else. It enabled me to see the light at the end of the tunnel and that’s what I like about it.

“Learning one subject at a time was an important asset of an accelerated learning experience so there was no focus overload of learned information. . . .These students valued their fellow adult learners as key personal supporters to help them learn and cope with the complexities of their lives. They became a quasi-family of caring and supportive adults faced with adult life demands.” (Kasworm, p. 7) .

Alumni Attitudes

Because alumni have acquired experience in the workplace after completing their program in accelerated classes, their perceptions of the value of their education are valuable. Similar to the Wlodkowski and Westover (1999) study, the results of a 2005 alumni survey of satisfaction at National University indicated that graduates were very satisfied with the quality of their education. An overwhelming majority of alumni indicated that their career success is greater as a result of their National University degree and that they would recommend this program to others (Alumni Feature Assessment, 2005). When asked what convinced them to enroll at NU, the top three responses were (1) accelerated one month format; (2) Evening course schedules and (3) convenient/numerous learning centers.

The findings of the 2004 survey had similar results. The purpose of this survey was to collect feedback from recent graduates in order to improve the quality of the National University Academic programs. This survey was conducted in March, 2004. Participants were asked to rank 36 feature attributes on *importance to education received* (1-10 scale). They rated the *level of satisfaction* with each. These feature attributes were in four categories: teaching and learning, support for student learning, achieving educational outcomes, and academic climate. A 1-10 scale was used where 10=extremely satisfied and 1=not at all satisfied (Alumni Feature Assessment, 2004).

Methodology. An emailed invitation was sent to 14, 859 recent graduates asking for their participation in the survey. Phone invitations were conducted in cases students could not be reached otherwise; 1489 surveys were completed. The margin of error for the entire results of the survey was plus or minus 2.4 percentage points at a 95% confidence level. Two survey areas particularly touched on the value of accelerated programs in higher education: *Teaching and Learning Attributes* and *Achieving Educational Outcomes Attributes*.

Survey results: Teaching and Learning Attributes. The following teaching and learning attributes were surveyed:

Value/worth of education

Quality of instruction

Availability of courses

Relevance of coursework to current position or chosen career

Overall quality of academic program

Developed competence in career-related skills

Developed a comprehensive knowledge set in field of study

Coursework provided theoretical & practical perspective

Breadth of course offerings

Rigor of curriculum

Increased interest in continuing your education

The results of this portion of the survey were presented in a scatter plot of alumni mean importance and mean satisfaction ratings for these eleven teaching and learning attributes measured. All attributes were identified to be of “high importance” and “high satisfaction” among alumni. The survey results suggested the teaching and learning attributes of highest satisfaction were “availability of courses; relevance of coursework to current position or chosen career; rigor of curriculum; developed competence in career-related skills; developed a comprehensive knowledge set in field of study; coursework provided theoretical & practical perspective; and breadth of course offerings” (Alumni Feature Assessment, 2004).

Survey Results: Achieving Educational Outcomes Attributes. The following Achieving Educational Outcomes Attributes were surveyed:

Development of intellectual confidence

Ability to think analytically and logically

Understanding your rights and responsibilities as a professional

Ability to effectively use technology

Ability to define and solve problems

Ability to work-learn independently

Ability to formulate creative/original ideas

Ability to lead/supervise tasks/groups of people

Ability to develop and practice interpersonal skills

Learned ability to speak effectively

Learned ability to write effectively

Ability to work as part of a team

The survey results were presented as a scatter plot of alumni mean importance and satisfaction ratings for these twelve achieving educational outcomes. All attributes were identified to be of high importance and high satisfaction among alumni. Two other parts of the survey addressed (1) support for student learning attributes and (2) academic climate attributes. These areas also indicated that there was high satisfaction among alumni in areas they considered of high importance.

In a university where all courses are taken in a one course/one month format, these alumni results indicate that students in all schools and departments, in undergraduate and graduate levels (1) were very satisfied with the format and accessibility of classes, (2) believed their education was relevant to their chosen work, and (3) viewed the academic rigor as strong.

Teacher Education Program

National University “recommends more teachers for credentialing than any other single institution in California.” (Factbook, 2006). The School of Education is by far the largest at National University, and the credential program is a thriving part of it. Graduates of the National University Credential program are asked to participate in an exit survey at the completion of the program that measures the quality of instruction and the relevance of classes to their experience in the classroom. Like other programs, these classes are presented in an accelerated format: one

class/one month both online and on ground. Classes meet two evenings a week for 4 ½ hours as well as the final Saturday of the month for a total of nine classes or 45 contact hours. This “situated learning” has a practical focus that is tied to real classroom activities, observations, videos of classroom performance, etc. The Methodology courses use practical, hands-on learning experiences and include teaching demonstrations, the study of teaching strategies, and lesson plan development.

In the Teacher Education Exit Survey (2004), participants were asked to (1) rate the quality of instruction and faculty in their program; (2) rate the degree the credential program enhanced their ability to manage behavior of students and to teach students from diverse ethnic backgrounds; and (3) rate the value of each class to the development of their teaching ability. Similar to the results of the Alumni survey, 83.4% of students completing the Credential Program Exit Survey rated the quality of teaching as “very good-exceptional,” 76% of the participants rated the credential program as enhancing their ability to manage student behavior as good to exceptional (this question connects with the real daily life experience of a teacher), 90% rated the preparation to teach students from diverse ethnic backgrounds very good-exceptional, and 80% rated the entire program as good to exceptional. Student satisfaction and academic performance reported in the Teacher Education Exit Survey mirror the results and conclusions put forth in all studies of accelerated learning programs and courses described in this paper.

Conclusion

The critical need to train more teachers for the classrooms of the 21st Century is without dispute. Student populations are increasing worldwide, Baby Boomer teachers are approaching retirement, and teacher retention rates remain unsatisfactory. The benefits of an accelerated learning program in which students with Bachelor’s Degrees can complete all class work and

required state tests of competence and be ready to enter the fieldwork segment of their program in *one year* need serious consideration. If we can prepare our future teachers well in a shorter period of time and can demonstrate that these students are getting a strong education, one that readies them for today's classroom challenges, more universities world wide would do well to consider adding this compressed format to their traditional offerings. Both students and instructors appreciate the convenience, the shorter time frame, and the real world emphasis accelerated programs afford. Perhaps it is time that more universities take a second look at their options in order to serve their students more fully.

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