

## LARGE CLASS SIZE: STRATEGIES FOR SUCCESS

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### ABSTRACT

Large class size may be the result of many factors: lack of physical space, insufficient teaching staff, budgetary constraints, unexpected high enrollment, changes in degree/certificate requirements, etc. No matter what the cause, large class size is already a reality for some language teachers and no doubt will be an increasingly common situation in the language classrooms of tomorrow.

This paper will discuss different aspects of the challenges presented by large class size: administration, evaluation, syllabus design, materials development and how to most effectively deal with the large numbers of students in the language classroom. It will be seen that maintaining quality language programmes even with high student numbers is not only feasible, but can also lead to innovative pedagogic and administrative strategies.

### Introduction

Language programs often have large numbers of enrolled students, limited instructional time, less than adequate resources, limited financial support, and a daunting student : instructor ratio. Given these less than ideal parameters, language course administrators and instructors have a difficult task at hand: how to provide relevant, interesting and meaningful programs.

This paper will look at ways in which problems associated with large class size can be addressed. Areas which will be discussed include: what previous studies have concluded in regard to class size, what constitutes a large class, how to effectively deal with large numbers of students, evaluation, creating a viable syllabus, classroom management and materials development.

### Literature Review

There have been many studies which have tried to tackle the issues involved with large class size. Contrary to what many language professional may feel, large class size is not a new phenomena nor is it restricted to language teaching. Studies of class size can be found in the professional journals of academic disciplines. Edmondson and Mulder (1924) looked at size as a factor in achievement in university Education classes over seventy years ago. In an analysis of business communication classes specifically, Peterson and Baird (1978) found few differences which could be attributed to either large or small class size. Longitudinal research on class size in a primary school in America found that class size did make a difference: students in small classes (average size 15) did significantly better than students in "regular" size classes (average size 24). (Pate-Bain, et.al. 1992.) (Lewis and Woodward (1988) compared four "small" (average size 19) business communication classes with one large (58 students) class. Their findings suggest that it is teaching methodology rather than class size which contributes best to learning. McKeachie (1980), likewise felt that the teaching method was of greater importance in achievement than the class size. Glass and Smith (1979), in one of the most comprehensive studies of class size, applied a meta-analytical approach to more than three hundred studies on class size. Their results indicated that classes of less than twenty students were optimal. Odden (1990) concluded in his review of large class studies that "research on class size and student achievement supports dramatic - and only dramatic - class size reductions."

However, this is the essential problem with class size studies: for the studies which conclude smaller is better, other studies can be found which refutes these findings. For example, Educational Research Service (1980) ascertained that Glass et al's meta-analyses on class size research contained over generalized conclusions, inconsistent methodology and contradictory interpretations. LoCastro (1992) drawing from her work with Japanese students, cites method, teacher, and the students' own efforts as more significant than class size, other students and textbooks in L2 acquisition. After reviewing many of the class size studies, it can be seen that there is no consensus when it comes to whether class size is a determining factor in scholastic achievement. Care must be taken when looking at these studies to be certain to get a balanced view of the research. It can be far too easy for a researcher or administrator to use only the results which support his or her own views in arguing for or against smaller class size.

### How Large Is Large?

Before going any further, it might be helpful to define what is meant by "large class size." How large is large? Both teachers and administrators have different ideas as to what constitutes a large class. Anecdotal stories of listening/speaking skills classes which contained several hundred students in China have been making the ELT rounds for years. "Conversation" classes of sixty or more students often confront the language teacher in Japan. Teachers in all disciplines have different perceptions of what they consider a large class to be. Language teachers, likewise, do not agree in terms of how "large" large is. In Singapore, the author found that language teachers stated that a class size with the mean of 23 students was large. In Hong Kong a comparable group of language teachers asserted that 16 and over would be considered large. Really down-sizing, Horne (1970) argues that in intensive language classes, five to nine students constitute an optimally small group.

In looking at United Nations statistics which detail the ratio of pupils to teacher, it can be seen that class size in elementary schools is much higher in Asia, the Middle East and Africa than in Northern Europe and North America. As an example, the average class size in Hong Kong is 30.8 pupils while in Canada it is 9.3 and in both the United States and United Kingdom, it is about 20 (Glass, et. al., 1982).

What researchers consider a large class to be, is again relative. Harpp (1994) considers organising chemistry classes greater than 200 students to be large. Kumar (1992) considers large English classes as consisting between 35 and 100 students. Table 1, below, illustrates how different researchers define "large".

**TABLE 1 : What Constitutes a Large Class**

Researcher Year	Level/Subject	Large Size	Country
Horne (1970)	Adults Foreign Languages	10	USA
Peterson & Baird (1978)	University Business Writing	80	USA
Buchanan & Rogers (1990)	University Not mentioned	80	USA New Zealand
Kumar (1992)	Grades 6, 9 English	45	India
Lo Castro (1992)	University English	40	Japan
Harpp (1994)	University Organic Chemistry	200+	Canada
Marcus (1996)	University English	16	Hong Kong
Marcus (1996)	University English	20	Singapore

Even the nomenclature meant to indicate size and style of instruction may be misleading or hard to pin one definition on. Lecture, seminar, tutorial - there are no hard and fast rules of what norms to follow. For example, in Singapore, university-level communication skills tutorials are not the small group tutorials that are the norm in the United Kingdom, but can be groups of over thirty students.

Like the class size studies themselves, large class size is subject to individual interpretation and possible misinterpretation.

As Oldejo (1992) points out, there have been very few studies of class size which specifically look at second language learning. He cites the Lancaster-Leeds Language Learning in Large Classes Research Project as one study which looked specifically at L2 issues. At the time of Oladejo's writing, the results of the Lancaster-Leeds research were not complete, but as Oladejo rightly points out, there are some inherent problems with the Lancaster-Leeds research viz, the questionnaire design, the choice of respondents, and the analysis of the data

supplied. Allwright (1989), writing in the Lancaster-Leeds project, cites the lack of evidence in regard to language teaching and class size but concludes that "Teachers undertaking a campaign to reduce class sizes, nevertheless, are likely to find their case undermined, rather than boosted, by the available research evidence, however inadequate it may be at present. They have also to face the possibility that perhaps class size, after all, is not the powerful factor they have come to believe it to be." These are scarcely encouraging words for those in the "smaller is better" camp.

Perhaps the paucity of studies on class size as a factor in L2 learning reflects where most language programs exist within this academia; they may as a whole be viewed as a necessary evil, but traditionally language programmes have not been allocated the money and resources for research into this. Despite this lack of specific L2 research, class size is a very important area to consider in program design, management, administration and evaluation.

### **Does Subject Matter Matter?**

As mentioned previously, class size appears to be a concern in all academic disciplines. But are some subject areas better suited for large class size than others? If we look at the inconclusive results from the class size studies, it would be impossible to state categorically if some subject areas lend themselves to larger or smaller classes. Yet, if administrative decisions have to be made as to which courses will have larger sections than others, are there 'quick and dirty' ways to determine who gets what? Common sense dictates that courses which focus on facts as opposed to the acquisition of skills may be more amenable to large class size. Size may not matter as much in courses where rote memorization is the order of the day. This may be seen in Asian classrooms which are, on the whole, substantially bigger than European or U.S. classrooms. Size also is probably not as important a factor for success in introductory courses of a technical nature.

### **Teachers and Class Size**

One factor that came up time and time again in the large class size studies was the teacher himself/herself. How teachers react to the prospect and reality of large class size varies, of course, from individual to individual. Gilman et. al (1987) noted that teachers' attitudes and morale was more positive when dealing with small class numbers. The impossible-to-measure variable of teacher belief that, in fact, teachers believe they will do a better job when teaching small classes certainly contributes in no small part to the 'success' of a class. Research findings are generally consistent in demonstrating that smaller classes result in better teacher classroom attitudes and behaviour (Odden, 1990) Glass. et. al. (1982) also concluded that teachers' attitudes and resultant classroom behaviour were better with smaller classes. In their meta-analysis of 30 studies which examined teachers' attitudes in regard to class size, they found that in small classes teacher morale is higher, they enjoy their pupils more, have more time to plan for class and are more satisfied with their performance.

Similarly, Allwright (1989) maintains that the teachers who took part in his work on large class size maintained that large class size "[prevented] them from doing things that would indeed be significant to learner achievement."

It would be specious to extrapolate and state that smaller classes make for better teaching. There are many variables which make up what could be regarded a successful class: individual teacher capabilities, the teacher's own grasp of the material, the background knowledge the students bring to the class, the background of the students, the time and length of the class, and relevant materials all can contribute to a successful class. It is extremely difficult, if not impossible, to accurately measure these variables.

A different slant on the question of teacher attitude towards teaching large classes argues that with the prospect of facing a large class, the teacher is better organized and prepared, and will bring to the seminar or lecture a higher degree of enthusiasm for the material. Indeed, the author found the prospect of lecturing to 650 students made her examine and reflect upon the material much more closely than she ordinarily would.

Project STAR in the United States showed that teaching styles did not change in regard to class size, but this research only looked at elementary school classes. Most teachers at the tertiary level would report that their teaching styles do change in regard to class size. The mode of discourse, by necessity, is different in a lecture from a small tutorial.

The Project STAR team interviewed and observed the teachers they were observing for their research. Enthusiasm, positive attitudes, humor, high expectations of their students and small class size were all cited as factors in teacher effectiveness (Pate-Bain, et. al, 1992.) While Project STAR was only looking at elementary school data, those teacher attributes would certainly be relevant to the L2 classroom.

### **Students and Class Size**

Language learners differ in learning styles. What works for one student, may not necessarily work for another. Certainly this may be the case when it comes to class size. Some students may take more comfort in a larger class - contrary to popular thinking that interaction makes all the difference in language acquisition. That they are less likely to be called upon to interact with the teacher may breed contentment with some students who prefer anonymity. LoCastro (1992) cites culture as a variable in language learning. Group-oriented cultures may not feel as comfortable in very small classes. Large classes give some students the anonymity they regard as

necessary when dealing with such loss of face activities as learning a language. This would be especially true for many Asian students. Ultimately, it is up to the teacher to recognise that different learners have different preferences in learning styles.

Do students prefer smaller classes? Boud, et. al (1987) found that 63% of the Australian students they surveyed preferred smaller classes. McLeish (1968) found that students strongly preferred small seminars and tutorials rather than lectures. Stones (1969) came up with similar results. In his research at the University of Birmingham, 53% of the students questioned preferred seminars. Questioned further, 46% of the students stated the optimal size of a seminar would be six to ten students; another 33% stated that 11 to 15 students in a seminar would be the optimal size for a seminar.

But does student preference for small class size translate into higher scholastic achievement? This has not been determined and would be an especially tricky area to measure.

### **Lecture Theatre and Classroom Practicalities for Dealing With Large Class Size**

Large classes are already a reality for many. What are some ways for the teacher unaccustomed to large classes, to ensure a successful transition? First, let's look at some of the nuts and bolts which will help make classes operate more smoothly.

Graphic aids must be large enough so that all class members can see them. In a large lecture theatre this means that words on overhead transparencies should be at least 1.5 cm (one inch) in height. Illustrations, likewise, should be larger than what one would use in a smaller classroom. Do not try to cram too much information on a transparency. It is better to use more transparencies than to put too much information on individual transparencies. Details in illustrations should be kept to a minimum. When writing on the board, use slightly larger letters than you would in a smaller class. It is useful to ask the back of the class if they can see what you have written.

The teacher who must teach in large classrooms or lecture theatres should be aware of some of the inherent physical problems that are part and parcel of these environments. Chairs which are fixed to the floor of the classroom mean that small discussion groups are difficult to form; students may pivot in their seats and interact with the students in the row behind them. This makes for a rather awkward two "panel" discussion. Fixed chairs and column supports also mean that some students may not be able to see or hear the lecturer.

Hall's (1966) research on space indicates that spatial separations up to about 7 meters (about 8 yards) are for "public" communication but are not beneficial to interpersonal interaction. Thus, the climate for meaningful communication is hindered with large classes. This can be partly solved by walking around the lecture theatre or moving around the classroom. Of course such perambulations should not detract from what is being taught; the focus must be on the material.

The following are other considerations which help facilitate the physical running of the successful large class:

1. decide the best places to locate handouts before the class arrives
2. view the classroom or lecture theatre before the class to access the need for microphones
3. make sure the microphone works before meeting the class (i.e. the batteries are not dead)
4. determine if there will be any specific line of sight problems
5. preview one transparency for the back of the room to make sure that it can be read from that distance.

All of the above suggestions can be done before meeting the class for the first time. By having fewer operational problems to worry about during the class, the teacher can optimize his/her attention to the effective presentation of the material.

### **Teaching Strategies for the Large Class**

Strategies that language teachers can use when faced with large class size include many practices that are the same as in the smaller classes: plenty of small group work, discussion groups, workshop approaches, teamwork, simulations, lectures, individual consultations at student's request, self-access centres, letting students teach part of the class, videos and other "spectator" sessions, individual work with the teacher demonstrations, and competitions. Actual student numbers will help determine which teaching approaches can be utilized. In a class of 650 students, small group work is out of the question. By necessity, the class must be a lecture. "Meaningful interaction," and "interactive classroom activities" are buzz phrases that all language professionals know, but these terms may lose a bit of their potency when the sheer force of student numbers is a reality. Yes, the lecturer will try to make the lecture meaningful, but interactive classroom activities are meant for another venue.

If a lecture format has been dictated, the teacher must be organized. Coming in unprepared and winging it in front of hundreds of students is a skill that most teachers do not possess. The trick is to make the delivery look as fresh as possible; "spontaneously organized" might best describe a lecturing style which keeps many students interested. Enthusiasm for the material being presented is very important. Candor, if the material is dry, ("I realise that this may not be the most fascinating stuff you'll ever hear,") demonstrates empathy to the students, and may make them more inclined to continue listening to what you are saying. The use of visuals cannot be underestimated. They, again, keep the students interested in what is happening in the front of the lecture theatre. Tell the students when office hours are. Giving your E-mail address facilitates student-teacher communication. Many students who might be too intimidated or

shy to ask questions in a large theatre will ask questions via E-mail. Stick around after the lecture, if that is possible, to answer any questions.

Videos may prove very useful in a lecture format class. One proviso though with the use of videos: do not use them to the extent that lectures and teacher input cease to exist. Before using a video, ask yourself: what can this video express, or explain better than I can. If an answer is not forthcoming, it may be best not to use the video at all. Videos may be an extremely useful teaching tool, but they should not be used to the extent that lectures and teacher input cease to exist. A worksheet to accompany the video will help students focus on listening for specific details in the video.'

### **Syllabus Design**

In designing syllabi specifically for large language classes, realistic expectations in terms of the amount and degree of depth of the material that can be covered must be kept in mind. Subject matter too plays a role in syllabus design. A large class in listening and speaking skills will probably necessitate more size-accommodation changes than a large reading skills class. Depending upon instructional resources, syllabi can be tailored to include more assessments.

Syllabus design is dependent upon the mode of instruction, i.e. a lecture-tutorial format should produce a different sort of syllabus than a seminars-only mode of instruction. For example, in the communication skills course at Nanyang Technological University in Singapore where the student enrollment is approximately 650 and the instructional staff is eight, an attempt was made at interspersing the written assessments throughout the term, so that there was never a 'pile-up' in terms of marking.

### **Classroom Management**

Pictures of students can help the instructor learn the names and associate names to faces. This will, at the very least, help to personalize the large classroom. Trying to learn all the names may prove to be an impossible task, but to learn maybe five or six names will again help to personalize the class. It is also very helpful to elect or appoint a classroom representative who can liaise with both the class and the teacher in regard to assignments, meeting times, and any other classroom management matters.

At the end of the term, revise, determine what went well and what did not. Do this right away or chances are the negative points of the course will quickly recede from memory!

### **Materials Development**

Are there specific materials which should be developed for large classes? Ready made materials are often included in the teacher's editions of texts. Some of these materials may be immediately suitable for use; others will have to be adapted. The instructor may have to adapt material for use with large classes. Group problem-solving activities rather than individual activities may help promote greater interaction between students. If the language professional is aware of the problems inherent with large groups, materials development should not be more challenging than it is for smaller groups.

### **Evaluation**

In many disciplines multiple choice examinations are the logical way of dealing with large student numbers. Subjects where objective factual information forms the focus of the coursework, lend themselves to this sort of evaluation. But what of language classes? Granted, the TOEFL, which some may view as a language examination, is primarily a multiple choice examination, but it is not a measure of what is learned in a specific course. The challenge of having to evaluate the progress of so many students in a large class is a daunting task. Specific strategies for evaluation depend upon the course content. If multiple choice examinations are used, the different forms of the examination must be scrambled so as to minimise cheating. Distractors must be very tough. Using teaching assistants (TA's) is often suggested as a solution to the problem of marking hundreds of homework assignments or exams. Unfortunately, language teachers know all too well that when it comes to allocation of TA's in a university, often times the administrative powers-that-be do not perceive the need for allocating the personnel resources to English departments.

Another problem concerning evaluation is that the sheer number of students may cause the teacher not to set as many assignments as he or she might have, had class size been smaller. This can especially be a problem in writing courses.

Peer correction in the classroom can cut down on the number of papers an instructor must mark. Group correction of written work can promote interactive activities. When peer correction is utilized it is important that mixed ability groups are created by the teacher.

One other way of dealing with marking for large groups is to have students submit pair or group assignments. For example, a 36 member writing class would be given an assignment which they would do in pairs. Thus the teacher has a more reasonable eighteen papers to look at and the students have had to interact to write their assignment. If a teacher is concerned that perhaps the assignment is not a 50-

50 collaboration, the students can be asked to specify which parts of the assignments they were originally responsible for. Just in terms of the management of grading, the language instructor has 'hit upon' an activity which is communicative in nature.

Holistic marking is advised for written assignments. This is really the only practical approach to large numbers of assignments. This is a pedagogically sound approach for dealing with a real problem.

Record-keeping should not be done by hand, if at all possible. It is best to enter marks (or better yet to have them entered by someone else) into a computer program which will provide immediate access at all times during the term. Make sure there is a back-up file. When dealing with large numbers, record-keeping can be a real chore. Usually at large universities, there is some sort of in-house software available for record-keeping. Such software often can be quite useful in determining statistics for the course as a whole, standard deviation on individual exam questions, etc.

## Conclusion

James Sturdevant writing in *College Composition and Communication* (1972) makes a strong case for teachers themselves to become proactive in regard to large class size: "... large group instruction is a certain reality of the near future - either we find ways to utilize the concept in ways acceptable to our own discipline, or we will find administrators, often lacking expertise in our area, quite willing to suggest how we should go about it."

Indeed, efforts should be made by the teachers themselves when faced with the reality of large classes, so that optimal learning may take place. The onus is on the instructional staff to provide quality instruction no matter what size the class.

## Bibliography

Allwright, D. 1989. How important are lessons, anyway? *Lancaster-Leeds Language Learning in Large Classes Research Project Report No. 12*.

Boud, P., Nightingale, P. & Holmes, W. 1987. Problem-solving tutorials: moving from small groups to large. *Research and Development in Higher Education*, 8, 279-285.

Edmondson, J. B. & Mulder, F. J. 1924. Size of class as a factor in university instruction. *Journal of Educational Research*, 9, 1 - 12.

Educational Research Service. December 1980. Class size research: a critique of recent meta-analyses. *Phi Delta Kappan*, 239-241.

Gilman, D., Swan, E. & Stone, W. 1988. The educational effects of a state supported reduced class size program. *Contemporary Education*, 59, (2), 112-116.

Glass, G. & Smith, M. 1979. Meta-analysis of research on class size and achievement. *Educational Evaluation and Policy Analysis*, 1, (1), 2-16.

Glass, G., Cahen, L., Smith, M & Filby, N. 1982. *School Class size - Research and Policy*. Beverly Hills: Sage Publications.

Hall, E. 1968. *The Hidden Dimension*. New York: Doubleday. Harpp, D. 1994. Special problems of big classes - some common sense solutions. *Journal of Chemical Education*, Vol. 71, (8), 629-631.

Horne, K. 1970. Optimum class size for intensive language instruction. *Modern Language Journal*, 54, (3), 189-95.

Kumar, K. 1992. Does class size make a difference? - Exploring classroom interaction in large and small classes. *RELC Journal*, Vol. 23, (1), 29-47.

Lewis, G. L. & Woodward, P. 1988. Teaching business communication skills in large classes. *The Journal of Business Communication*, 65-86.

LoCastro, V. 1992. Learning strategies and Japanese language learners. *ICU Language Research Bulletin*, 7, (1), 58-74.

McKeachie, W. J. 1980. Class size, large classes and multiple sections. *Academe*, 24-27.

McLeish, J. 1968. *The Lecture Method*: Cambridge Monographs on teaching methods.

Odden, A. 1990. Class size and student achievement: research-based policy alternatives. *Educational Evaluation and Policy Analysis*, 12, (2), 213-27.

Oladejo, J. 1992. Studies in language learning in large classes: a critical appraisal. *RELC Journal*, 23, (1), 48-61.

Pate-Bain, H, Achilles, C., Boyd-Zaharias, J. & McKenna, B. 1992. Class size does make a difference. *Phi Delta Kappan*, 74, 3, 253-256.

Peterson, L. & Baird, H. 1978. Analysis of higher level cognitive learning in an individualized business writing class. *Educational Research Quarterly*, 3, (2), 29-45.

Stones, E. 1969. Students' attitudes to the size of teaching groups. *Educational Review*, 21, 98-108.

Sturdevant, J. 1972. "Large group" doesn't have to be a dirty word. *College Composition and Communication*, 23, (5), 419-421.

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