

The Self Access Centre as Mass customization

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Abstract

This paper describes the Self Access Centre (SAC) at the Universidad de Quintana Roo and presents the research support for the model in terms of mass customization. The SAC with its systems, materials, activities and tutor support may be described as offering mass-customized language education. Tutor support is conceived in systemic terms as mass customization, but as provider of professional advice in support of students' own learning projects and facilitator of feedback in productive skills, tutor support is highly individualized. However, the mass customization element makes individualization efficient and achievable.

1 Introduction

Mass customization is a term taken from the management of processes for industrialized production (Davis 1987). In the original industrial context, a product such as a bicycle is mass customized if elements such as the frame, wheels, saddle, paint, gears and brakes are selected and combined to meet customer requirements (Kotha 1995). The producer remains responsible for ensuring the quality of each component and the compatibility of each with the complete final product. The mass customization service would be useful to an expert or well informed cyclist, and the extra cost involved may be more acceptable than buying a standard product and adapting it afterwards. In education, the combination of components to provide a customized product is often interpreted as modularization of the curriculum (cf. Ausburn 2002, Waslander 2007). A student taking a course is typically obliged to study a set core curriculum and invited to choose other modules according to her needs or preferences. However, there are problems with the approach in an educational context. Modular courses may lack the sense of a coherent final product with proven functionality, and making students responsible for taking decisions about their learning may amount in some cases to a dereliction of duty on the part of educators (cf. Laurillard 2002: 196).

In language education, there are three lines of development which tend to support mass customization. Learner centred approaches (Nunan and Lamb 1996, Tudor 1996) propose roles for teachers compatible with the professional management of learning. In these approaches, expert teachers are required to apply and interpret instruments designed to discover significant information about learners in order to manage their learning processes. A second approach to mass customization is that taken by the TESOL organization in the USA, where ESL programmes (TESOL 2000) and teaching services (TESOL n.d.) are made accountable to learners by the application of explicit indicators and standards in a quality management approach. While the TESOL approach does recognize the need to attend to individual differences and provides a useful catalogue of services, the quality management orientation leads to a service provided on the service provider's terms, however well intentioned those may be (Farmer 2006: 162–163). Autonomy in language learning is a third approach to mass customization, where research has moved from issues of students taking control of learning (Pemberton et al. 1996) to maintaining and sustaining learner control through appropriate teacher roles

(Lamb/Reinders 2008). Learner control over learning objectives and/or materials remain central to autonomous learning, but teaching support for learning is becoming a prominent issue.

All of these approaches have influenced the design of the Self Access Centre (SAC) at the Universidad de Quintana Roo (UQRoo), campus Cozumel. Learner control, a key concept in learner autonomy, is taken to be fundamental in deciding learning objectives and preferences for meeting them. However, expert professional advice and learning management is also part of the system so that learners can be guided on what kinds of objectives can be achieved and how, as well as how the achievement of objectives might be verified. The TESOL approach facilitates the definition of the specific services offered to learners and making those services explicit to guide both service providers and learners.

I will now give a general description of the SAC at UQRoo and a more detailed account of what tutors do, how they learn to do it and how they are evaluated. I will then show how tutor services may be described in terms of mass customization.

2 The self access centre at UQRoo Cozumel

The SAC at UQRoo was designed specifically to support individual learner differences, and the development of learner autonomy assumed a secondary role as a desirable possible outcome. In practical terms, the model for the SAC makes learning materials and activities available within their original context, as a coursebook, reference book, video or interactive material. Pathways are provided compatible with students' likely objectives: to advance within the University's language programme, prepare for external and internal exams, explore alternative explanations of form, practice specific skills and structures, or acquire language for specific purposes. SAC users may take or reject any part of the materials or pathways provided, but personal contact with a tutor is seen as central to learners taking informed autonomous decisions. Pathways are provided in either written or oral form. The guidelines for developing suitable pathways is reproduced in Appendix I as an indication of the kind of orientation learners can expect.

The SAC at UQRoo is intended to support student learning, in line with Paul Ramsden's (1992: 5) definition of the aim of teaching as making student learning possible. Student learning is characterized as either directed towards specific objectives through learning activities, or towards serendipity learning through exposure to the language through print, digital or video material. Learners have free access to the materials and may work with them individually or in groups.

Phil Benson (2001: 113–135) discusses resource based approaches to learner autonomy, including self access systems, and points out that self access does not necessarily promote learner autonomy. The UQRoo system is designed to support autonomy rather than impose it on users, and concentrates on providing users with all the support they may need for their learning while not actually giving classes. Learners are provided with a range of materials backed by human resources as guides to the materials, help with deciding on objectives and ways of reaching them, feedback on productive skills, and guidance on monitoring progress. In David Gardner and Lindsay Millers' (1999: 63) typology of SACs, the UQRoo system may be described as a 'supermarket' where learners are free to browse the material.

2.1 Functions of self access tutors

The SAC was set up in 2000 as a project initiated by a full time teacher and was staffed and run by a mixture of full and part time teachers providing tutor support on a rota system. Responsibility for running the SAC was one of the duties assumed by a full time member of the academic staff, along with teaching and research.

Self-access tutors are often characterized as being different from teachers in important respects (cf. Dickinson 1987, Gardner/Miller 1999, Kelly 1996) and are supposed to be supportive rather than directive. The SAC at UQRoo respects the facilitating and supportive roles for tutors encountered in much of the literature, but emphasizes the expert input required from tutors. Tutors in the SAC come from a teaching background and it is assumed that they may need orientation in relinquishing control and support in identifying and providing appropriate expert services.

Tutors in the SAC do not necessarily need to be proficient in the language being learnt, or indeed in some other aspects of their work. The key knowledge area is awareness of the limitations of their own knowledge and how to compensate for those limitations. Thus a tutor who speaks no Italian, for instance, is still capable of guiding users to the materials, helping them plan their work, getting them registered in the system, monitoring progress and arranging for feedback on productive skills from competent Italian users as well as arranging for the design, application and marking of placement tests, diagnostic tests, progress tests and achievement tests. The tutor's responsibility is to make sure that users are supported in their learning by ensuring that these processes occur, and by documenting them. The tutor's self evaluation sheet for the areas of knowledge needed to provide the service is reproduced in Appendix II.

Tutors provide learners with the services outlined above. These services require competence in different areas of knowledge, which may be either the tutor's own competence or that of others which it is the tutor's job to integrate into the process. Standard forms are used to record two main processes. The first is the initial interview which has the objective of discovering and recording the learners' objectives and their preferred way of reaching them. The second is the tutorial progress interview, where the tutor monitors and records all aspects of the learners' progress and helps learners take any decisions resulting from the process. The documents are kept in the learners' personal file along with the learners' work. These files are freely available to both learners and tutors in an insecure filing cabinet.

2.3 Tutor Learning

Tutors are made aware of their responsibilities and the knowledge, skills and attitudes they and others need to carry them out. They are then invited to assess their own knowledge in the areas of competence that are described in Appendix II. In the training course that follows, tutors are guided through the material that explains what they are expected to do and which areas of knowledge are required to do it. Tutor attitudes are specifically addressed but the disposition to deliver the service which is implicit in their participation is perhaps the most important. Tutors then evaluate themselves with regard to the knowledge, skills and attitudes needed to deliver the service using the diagnostic instrument provided in Appendix II.

Where tutors themselves think they need more knowledge, it is provided in short topic specific worksheets. These are minimal introductions only, and tutors are encouraged to use and become familiar with the full SAC handbook which is available in both digital and print forms. The university library also has extensive resources available to tutors, but these are less focused on the specific requirements of the SAC in UQRoo.

Tutors come from a teaching background, and existing teaching skills, knowledge and attitudes need to be quickly adapted and reinforced to meet self access tutoring needs. The effectiveness of self access training is not measured using external instruments, but by the effective integration of new tutors into the work group. Communities of practice as conceptualized by Etienne Wenger (1998) accept novice members who then have the opportunity to become experts through participation in a learning organization. Thus good service to learners tends to evolve towards what the expert service providers, the community of practice, perceive to be excellence in a learner centred context. This is compatible with the independent learner con-

trol and development of learning capacity identified as characteristics of autonomy by Phil Benson (2001). Supervisors need to ensure that student learners get the full service promised from tutor learners, but need not assume control of or subject to evaluation every aspect of the work.

Feedback on tutor performance comes from learners, colleagues and supervisors, but self evaluation and reflective practice are the key elements in a community of practice approach. Informal and specific incident related reflection can be made formal at any time by involving colleagues and supervisors, but usually supervisors only have to revise at random a few files in the first weeks to make sure the processes are being documented. Opportunities for modifying and improving the service and the training programme occur at least once a year in a collective review of processes and problems.

3 Mass customization in the SAC

In broad terms, the materials available in the SAC may be seen as interchangeable or modifiable components or modules in a product which is to a greater or lesser extent influenced by the consumer. The product, in this case, is essentially the learning support service provided through tutors.

Rebecca Duray et al. (2000) proposed a typology of mass customization of manufactured products which may be adaptable to a learning support service. The essential elements of this typology are the type of modularity and the stages of production at which the customer exerts influence. Modularity, for Duray et al., is of two basic types. The first is where a standard component is modified to meet changing requirements, and the second is where existing components are combined in ways that meet new requirements. Customer influence may be in deciding the ways in which standard components are to be modified or in deciding how existing components are combined.

The matrix developed by Duray et al. may be adapted for language learning support in the SAC using appropriate nomenclature:

		Module modification type	
		Modifying Materials	Recombining materials
Customer intervention	Learner decides learning objectives	Learning support service 1: Clarification of objectives and measure of achievement. Modifications to materials and activities	Learning support service 2: Clarification of objectives and measure of achievement. Pathways through different materials and activities
	Learner decides learning materials and technologies	Learning support service 3: Definition of objectives and measure of achievement. Modifications to materials and activities	Learning support service 4: Definition of objectives and measure of achievement. Pathways through different materials and activities

Table 1: Module type/customer intervention matrix (based on Duray et al. 2000)

These learning services do not represent the complete service (see Appendix II), but they highlight differences in modularity and learner influence. The SAC at UQRoo aims to provide a full learning support service where learners may influence both their learning objectives and how those objectives are to be realized, and the resulting conception of tutor roles and responsibilities varies somewhat from those described in the self access literature. Tutor macro- and micro-skills as analysed by Rena Kelly (1996) are heavily teacher centred and emphasize

teachers' special expertise rather than the breadth of the professional service in support of learning. Descriptors of the service such as the 'supermarket' typification provided by David Gardner and Lindsay Miller (1999) or as resource based autonomy (Benson 2001) are somewhat inadequate to describe the model of self access offered in UQRoo, and the module type/customer intervention matrix may be a useful tool for describing learning support services more precisely.

Although modules of materials and activities may be re-engineered to meet special needs, most students in SAC follow the coursebook that they are using in class, or if they are studying independently, the one that they would be using if they did have a class. Students self evaluate receptive skills and request the feedback they want on productive skills. Written or oral pathway guides direct students to other explanations or activities to reinforce learning or correct misconceptions. Most students need Learning Support Service 4, occasionally Learning Support Service 2, and very rarely Learning Support Services 1 and 3. As a result, some 700 SAC users can be attended by one tutor in the mornings and another in the afternoon, assisted as required for testing and feedback on production by language specialists.

4 Conclusion

Mass customization, in lay terms, has been the norm in education since the beginning of public education. Schools adhere to fixed curricula but individual teachers make learning a personal experience for each student. What is changing is the agency of students, so that the personalization of education is not an accident attributable the teacher who happens to be assigned to the class, but a planned and planned for intervention by students.

Phil Benson's (2001) categorization of self access as materials supported autonomy is clearly out of tune with the SAC at UQRoo, which may be better described as learning management supported autonomy. In self access learning, tutors help in making suitable materials and activities available to learners, but do not control the learner's objectives or activities. Mass customization in the SAC opens up a space explicitly designed for learners to use their time and effort efficiently, using the materials and activities they need, while tutor services become correspondingly more focused on learning management.

User satisfaction is an issue in all services, including language education, but indicators need to be chosen carefully and analyzed critically to be meaningful. María Elena Llaven Nuca-mendi (2009) conducted research into all aspects of autonomous language learning in the SAC at UQRoo. In her qualitative study, she found that regular SAC users report a high level of satisfaction with both the materials and the service, but many more students limit their use of the facility to the minimum activities set by individual class teachers. Students who make minimal use of the SAC claim that they have similar access to materials and activities suitable for their needs at home or in their workplace. Highlighting learner agency through a mass customization perspective may make the SAC more attractive to marginal users, as well as making the regular clientele more demanding and more involved. Both of these developments would be welcome for all concerned with facilitating language learning in the university.

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Appendix I

Complementary work programmes for SAC users (Pathways)

Objectives:

1. To provide learning support for users appropriate for their level of learning autonomy.
2. To provide learning support for users for both language learning and language use.

Pathway format:

Section 1: Introductory page(s)
In Unit 1 of the course only

- Level of course
- Relationship to other courses
- General bibliography related to level.

Section 2: Objectives for the coursebook unit
- General objectives
- Specific objectives by skill
'By the end of this unit, learners will be able to...'

- Grammar
- Vocabulary
- Pronunciation
- Reading
- Writing
- Speaking
- Listening

Section 3: Activities
- General and specific instructions for coursebook activities

- Grammar
- Vocabulary
- Pronunciation
- Reading
- Writing
- Speaking
- Listening

Section 4: Self evaluation
- General and specific instructions for users
- Proceed to next unit?
- Need a different explanation?
- Need more practice?

- Grammar
- Vocabulary
- Pronunciation
- Reading
- Writing
- Speaking
- Listening

Section 5: Materials
- Additional activities from other sources
- Explanations
- Practice

- Grammar
- Vocabulary
- Pronunciation
- Reading
- Writing
- Speaking
- Listening

Appendix II

Tutor knowledge, skill and attitude diagnostic sheet.

The tutorial service requires tutors to ensure that learners receive all the support they need in their learning activities in the SAC. In order to provide that service, you will need the knowledge, skills and attitudes described in the list. Indicate your own assessment of your knowledge skills and attitudes and your perception of their importance in the appropriate columns.

Tutor: _____

KNOWLEDGE, ATTITUDE AND SKILL REQUIREMENT	PRESENT KNOWLEDGE, SKILLS AND ATTITUDES + good ✓ good enough – not good enough	PRIORITY (1–21, where 1 is top priority)
1) Design and selection of learning activities.		
2) Evaluation of the results of learning activities		
3) The cultural context of the target language.		
4) Learning strategies		
5) Learning styles		
6) Classification of activities and technologies.		
7) Typology of feedback.		
8) Needs analysis.		
9) Theory and practice of formative and summative evaluation.		
10) Criterion based evaluation		
11) Curriculum design		
12) Availability and use of materials and equipment in the SAC.		
13) Colleagues' areas of expertise.		
14) Colleagues' areas of expertise related to linguistic needs and learning styles of users.		
15) Areas of expertise of others outside UQRoo related to linguistic needs and learning styles of users.		
16) Institutional policy on the documentation and use of information about users.		
17) Language: skills (reading, writing, speaking and listening) and grammar, vocabulary, pronunciation, functions and notions.		
18) Practical experience in using SAC equipment.		
19) A critical attitude towards teaching methods: who benefits, who might they harm, how much and in what circumstances.		
20) A critical attitude to research and its applications.		
21) Tutoring procedures congruent with all of the above.		