

A NEW CHALLENGING FACET OF EDUCATION: FEASIBILITY OF BRINGING TECHNOLOGY INTO OVERCROWDED CLASSROOMS

دمج التكنولوجيا إلى الفصول المكتظة: نحو تحدٍ جديد من التعليم

UNE NOUVELLE FACETTE DE L'EDUCATION: VERS UNE INTEGRATION EFFICACE DE LA TECHNOLOGIE DANS LES CLASSES SURCHARGEES

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ملخص: تواصل تكنولوجيا المعلومات والاتصالات نموها في تطوير مناهج التعليم العالي. يبدو أن الفصول الدراسية المعززة بالتكنولوجيا تمكن من تطوير التعليم وتغيير المناهج وتنتج أشكالاً غنية من البحوث والتعاون عبر الإنترنت؛ كما أنها قد تعزز التعلم بالاكشاف واستقلالية المتعلمين والتركيز على المتعلمين وخلق الحافز المناسب للدراسة. إن جلب التكنولوجيا إلى الفصول المزدحمة هو، في الواقع، التحدي الذي أقلق عدد من الباحثين الذين يدعون إلى التفكير لتوفير الفرص اللازمة للنظر في التأثيرات المحتملة للتكنولوجيا الجديدة على نتائج التعلم. وهكذا، تحاول هذه الورقة تسليط الضوء على المهمة الصعبة للمدرسين من العالم النامي، لدمج التقنيات التعليمية الجديدة في الفصول الدراسية النموذجية من أجل ضمان تجربة تعليم / تعلم أفضل. ومع ذلك، يجب علينا أن ندرك حقيقة أنه على الرغم من الأهمية المتزايدة لتكنولوجيا المعلومات والاتصالات في التعليم، فإنه لا يوجد "حل سحري" سيجيب كل التحديات القائمة.

الكلمات المفتاحية: تكنولوجيا المعلومات والاتصالات (ICT)، فصول دراسية مكتظة، التعليم العالي، وإنجازات المتعلمين

Abstract : Information and Communication Technologies (ICTs) continues to grow in importance in developing the curriculum of higher education. Technology-enhanced classrooms seem to enable multi-modal teaching, change curricula and spawn rich forms of online research and collaboration; it also may promote discovery learning, learner autonomy, and learner-centeredness and create motivation in the classroom. Bringing technology into overcrowded classrooms is, in fact, the concern of a number of researchers who call for a pause for reflection to provide opportunities to consider the possible impacts of new technologies on the learning outcomes.

Thus, the present paper attempts to reflect upon the challenging task of teachers from the developing world to incorporate new educational technologies into their typical classrooms for a better teaching/learning experience. Nonetheless, one should be cognisant of the fact that despite the growing importance of ICTs in education, there is no "magic bullet" that will answer all the existing challenges.

Key-words: Information and Communication Technologies (ICTs), overcrowded classrooms, higher education, learners' achievements.

Résumé : Les technologies de l'information et de la communication continuent à prendre de l'importance dans le développement des programmes d'enseignement supérieur. L'intégration de la technologie en classe permet non seulement de donner lieu à un enseignement diversifié, mais aussi de modifier les programmes, concevoir de nouvelles formes de recherche et de collaboration en ligne ;

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ce qui peut également favoriser l'apprentissage par le biais de la découverte, l'autonomie de l'apprenant et la focalisation sur ce dernier et créer la motivation dans la classe. L'intégration de la technologie en classes surchargées est en fait la préoccupation d'un grand nombre de chercheurs.

A cet effet, le présent document tente de réfléchir sur la tâche difficile des enseignants dans les pays en développement dans le but d'intégrer les nouvelles technologies dans les classes types pour une meilleure expérience d'enseignement / apprentissage. Néanmoins, il ne faut pas oublier que, malgré l'importance croissante des TIC dans l'éducation, qu'il n'existe pas de «solutions miracles» pour relever tous les défis existants.

Introduction :

Tremendous developments in technology have brought out new needs for human beings to facilitate and speed up process to progress. In view of this fact, foreign language teachers have always been ahead of the curve in integrating technology in FL instruction and learning, seeing the benefits of technology even without an extant research database to confirm their judgment. Such an assumption, therefore, problematises how technology-enhanced classrooms may promote discovery learning, learner autonomy, and learner-centeredness, to consider the manner in which the inherent characteristics of a particular technology manage the learner's attention and create motivation in the classroom.

Within this changing time of globalisation where teachers have to deal with digital native learners, it seems crucial for them to be familiar with information and communication technologies to survive in this digital age. However, in developing countries, overcrowded classrooms seem to cover the general atmosphere of the teaching/learning environment.

Teaching in Overcrowded Classrooms

Teaching within overcrowded classrooms may be considered frustrating, overwhelming, and stressful. Teachers face challenges that are hard if not impossible to overcome. Researchers often believe that this atmosphere may strongly affect the quality of instruction and thus, the outcome of education. The only benefit of increasing class sizes is that it saves the district money.

Within this kind of classrooms, a great number of challenges may appear, for instance, teachers often suffer from is the increase of classroom discipline issues. More students provide more opportunities for personality conflicts, tension, and general disruptive behavior. Even the best teachers will find it difficult to manage an overcrowded classroom successfully, thus, instead of teaching; teachers frequently find themselves spending more time managing their classroom than doing their real job, notably teaching. Therefore, within this line of thought, there is no room for teachers to go around and check learners' progress. Corcoran et al. (1988) found that overcrowding and heavy teacher workloads created stressful working conditions for teachers and led to higher teacher absenteeism.

Moreover, the effect on students' learning ability in overcrowded classrooms may be the direct result of the impact overcrowding has on the teacher. This is mainly because of the following suggested reason:

- Teachers in overcrowded classrooms may be spread too thin and unable to give each student the one-on-one attention he or she needs.
- If students are not given the attention they need in the classroom, they may fall behind. This can affect not only standardized testing scores, but also learners' own enjoyment of learning, setting them up for failure in the future.
- Teachers in overcrowded classrooms may be more stressed out and overwhelmed, feeling as though they lack the time and resources to really make a difference. This can lead to teacher burnout.
- Teachers may find themselves spending more time managing the classroom organization and student behavior than actually teaching.
- The noise level increases the more students are packed into a classroom, which can affect some students' ability to learn or work.
- There is often not enough technology and resources to go around in an overcrowded classroom.
- It may be more difficult for the teacher to connect with each student on a deeper level.

Moreover, Crowded classroom conditions not only make it difficult for students to concentrate on their lessons, but inevitably limit the amount of time teachers can spend on innovative teaching methods such as cooperative learning and group work or, indeed on teaching anything beyond the barest minimum of required material. In addition, because teachers must constantly struggle simply to maintain order in an overcrowded classroom, the likelihood increases that they will suffer from burnout earlier than might otherwise be the case. (U.S. Dept. of Education)

What if teachers try the magic bullet of technology within their classroom setting, to overcome the maximum of obstacles.

Integrating Technological tools in Overcrowded Classrooms: the Challenge

It is often assumed that technology-based instruction may enable students to learn at their own speed, give and receive feedback from peers and instructors alike. Furthermore, it provides a wide range of variables within the learning and teaching opportunities. Higher education institutions throughout the world in general and developed countries in particular have started adopting a type of information and communication technologies (ICTs), which refers generally to as “course management systems (CMS) to improve pedagogy” (Limayem et al.; 2003; Tavangarian et al., 2004; Ifinedo, 2006; 2007a; Ngai et al., 2007).

Consequently, our educational systems are believed to be of great need to fundamentally address their missions towards possible ways of incorporating information and communication technologies (ICTs) to respond carefully to the current challenges. This is mainly to investigate and assess how our educational institutions may explore the courses, taking into account the creative and innovative use of new technologies within the teaching /learning process.

Educational technologies are said to be changing very rapidly. This resulted, in fact, newly pedagogical researches aiming at developing curricula that would effectively utilize the latest technologies. In this sense, there seems an existence of four widely recognized, flexible and well-researched and accepted pedagogies for learner-centred technology-supported environments: convenience and flexibility, contextualization, collaboration and communication and constructive feedback (Fox et al 2008: 10-11). These may shape the foundation for examining possible future technologies to judge the value of applying new technologies for a better language instruction, and thus a better ongoing academic training.

In this respect, Crystal (2006:271-272), suggests that we are witnessing an ‘electronic revolution’ which was bringing about a linguistic revolution. He puts forward the phenomenon of Netspeak in which he believes it is going to ‘change the way we think’ about language in a fundamental way, because it is a linguistic singularity – a genuine new medium’. Furthermore, Evidence indicates that when applied effectively, “technology applications can support higher-order thinking by engaging students in authentic, complex tasks within collaborative learning contexts” (Means, Blando, Olson, Middleton, Morocco, Remz, & Zorfass, 1993).

All this is fine in principle, but as ever the reality turns out to be different. Within our overcrowded classrooms, the application of these theoretical principles seems to be challenging. As teachers trying to adopt technologies within their typical classrooms, they should be aware of the delicate situation and apply the needed technologies wisely. Teachers must be exceptionally organized within such a specific learning environment. They may design attractive interactive lessons and work in sub groups, and develop a fluid system through trial and error to maximize the time they have with their students. With a large class, teachers must be structured, and this starts with strategically placed assigned seats. Students who are low academically and/or are behavior issues should be assigned seats towards the front. Students who are high academically and/or are well behaved should be provided seats towards the back.

Beyond the fact that students feel more engaged and motivated using technological devices, (I-pads, tablets, smart phones...), teachers may create energetic and engaging lessons. Every lesson must be enticing, energetic, and fun. It is easy for students in any class to be distracted and lose interest in such context, having opportunities to disturb and create discipline issues with their mates. This is especially true in a large classroom where the teacher will be unable to control and manage a huge number of learners, thus, as a short-term solution, technological aids in lessons may be unique, and full of attention grabbers.

In this fashion, Interactive Whiteboards (henceforth, IWBs) may create another way that the class can interact with the content of the lesson, however, teachers should be very cautious in using this kind of tools with large classrooms. Teachers can use the technology to promote higher order thinking and to lead substantive conversations. Interactive Whiteboards used within an e-teaching pedagogical framework have the ability to make an important impact on classroom practice. It may allow teachers to manage the teaching and learning process so that the learners can interact with the content and context of the lesson. Interactive whiteboards are believed to provide a number of benefits for students:

- IWBs may increase student motivation and enjoyment (BECTA, 2003a).

- IWBs may enable greater opportunities for participation and collaboration, thus developing students' personal and social skills (Levy, 2002).
- IWBs may eliminate the need for students to take notes, through the capacity to save and print what appears on the board (BECTA, 2003b).

Teachers must be a source of motivation to learners; their creativity is urgently called in large classroom settings. For instance, it is essential to understand that there are significant differences in a classroom of twenty students compared to a classroom of thirty and more. Teachers will have no control over how many students are in their class, so they may create ingenious small environments where learners act as individuals responsible on their sub groups. This sense of responsibility may lower problems in the classrooms.

Conclusion

In a more or less different context from the European architecture, developed countries need much more to face and direct their mission towards the current challenges. The educational institutions, therefore, need to urgently work diligently on building a scholarly community, advancing academic research, and the pursuit of truth. It is important to consider the fact that international competition and collaboration, across a wide range of disciplines, are progressively taking shape under the globalization process. The driving force behind such a trend has to be much more improved by the concentrated networks of communication and the increasing mobility of human resources.

In this vein, both teachers and researchers are carefully required to look for a balanced approach entailing appropriate technological instruments which hopefully meet the needs of learners of the newly age in this very particular context. For instance, Bruce and Hogan (1998) describe a world in which technology is an invisible but integral aspect of language use. Their point is that language professionals should wisely recognize how technology is deployed strategically by the competent language user if they are to teach the language learner about and through technology.

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