

Introducing Open Classroom 2.0 to Teachers through Immersive Learning

Kairit Tammets, Priit Tammets, Mart Laanpere
Centre for Educational Technology, Tallinn University
Tallinn, Estonia
[kairit.tammets, priit.tammets, mart.laanpere]@tlu.ee

Abstract

This paper addresses the challenge of engaging teachers in opening up the learning environment through the use of social software and other Web 2.0 tools. Immersive learning seems to be one of the best ways to do it. A joint European project eJump 2.0 involved eight educational institutions from ten countries. As a result of the project, three online courses for teachers were developed and pilot-tested. We are going to present the results of the follow-up survey that was carried out after completion of pilot courses and propose some guidelines for designing similar immersive learning courses for teachers.

Introduction

The concept of the open classroom is changing, partly because of the impact of Web 2.0 on technology-enhanced learning. While the Web-based Learning Management Systems (LMS) were the main drivers behind the e-learning innovation in the turn of the century, it was driving the development apart from the idea of the open classroom, open learning environment. Since 2005, the emergence of Web 2.0 has increased democracy, creativity and openness of the Web usage in general, allowing everyone to become an author, producer or publisher. It is inevitable that Web 2.0 is going to change also the way teachers and students learn with computers. Although most of the students will easily adopt the social software also for learning purposes, many teachers have troubles with it. Some of the teachers just cannot keep up with the pace of never-ending technological change; the others are feeling themselves convenient only if they can use familiar LMS where they have full control over the environment, materials and activities.

Open Classroom 2.0

Open classroom is not a new concept, already in 1980 Michael Woods wrote that open classroom contrasts with more “traditional” modes of schooling in many aspects like the teacher’s role becomes more of a non-authoritarian “catalyst” to learning and the pupil role becomes more active in a terms of the content and pacing of work, with an emphasis on self-motivation and self-discipline. At this moment concept was not so much related with technology, as it is now.

Open Classroom 2.0 can be defined as an open learning environment which consists of some Web 2.0 style technological solutions, but also embraces some of the innovative learning and teaching methods. From the technical point of view, we can talk about *social software* and *social media* tools together with *Web 2.0*, which has initiated discussions if and how it should be implemented in education. Web 2.0 has been defined by O’Reilly (2005) as the business revolution in the computer industry caused by the move to the Internet as platform and an attempt to understand the rules for success on that platform. In this paper, terms *social software* and *social media* are used as synonyms and they represent web-based software programs, which allow users to share data and interact with each other. *Social media* is a selection of tools or services, which can be described with the users’ objectives like participation, openness, conversation, community and connectedness (Mayfield, 2007). Klamma et al. (2007) have defined *social media* as the whole generation of new socially based tools and systems, which support activities in digital social networks. *Digital social networks* are social networks mainly realized by means of computer-mediated communication. It is essential to remark that most of the social media have not been developed for the educational purpose, but their characteristics strongly support those.

Different social media tools and services, including feeds and tags, enable to combine them and integrate personal learning environments, also with educational purpose.

From the technological aspects, open classroom represents the environment, which consists of social media tools selected and interrelated by learner that is the reason we may call it personal learning environment (PLE). The characteristics of it may be achieved using a combination of existing devices (laptops, mobile phones, portable media devices), applications (newsreaders, instant messaging clients, browsers, calendars) and services (social bookmarking services, weblogs, wikis) within what may be thought of as the practice of personal learning using technology (Wilson, 2006).

On the other hand, from the pedagogical aspects, learner or the group of learners and the facilitator manages open classroom, composed from social media. This kind of environment supports the learner-centered approach to learning and for that reason the environment is quite individualized compared with institutional closed learning management systems and allows developing Web 2.0 classroom for teachers and for learners. Another characteristics of that kind of learning environment is that it is dynamically changing, tools and services in it can be replaced after some time and combined together using feeds and tags, environment can be expanded according to learners' needs. The idea of the personal learning in such environment is that it will take place in different contexts and situations and will not be provided by a single learning provider (Attwell, 2006).

The PLE can be considered as second-generation network application, which is designed primarily as a personal lifelong learning environment. It extends learning beyond classroom and teacher centered model (Anderson, 2006). Still, in such open classroom2.0, there are still some issues that should be considered by the educators; learners need to be more self-directive, as the role of teacher have changed to more facilitator, who provides support; learners also might need scaffolding from the facilitators; and the social presence of there peers and facilitators is important in order to build learning communities.

Open Classroom 2.0 scenarios

Four possible scenarios for the future of Open Classroom 2.0 can be predicted:

The first possible scenario predicts a stand-by mode in the field of learning environments. We may see a pattern of co-opting, whereby the characteristics of the open learning environment is incorporated into the existing learning management systems (Moodle, Blackboard¹, etc), that will add extra features such as blogs and wikis in order to provide social software aspects in the LMS (Wilson, 2006). Many educators, including Mark Notess (2009), believe that LMS are forth saving for privacy and simplicity reasons. As there are already many innovative educators and teachers, it is not likely to happen that only LMS' will remain the main learning environment in schools and universities, which will lead us to the symbiosis of LMS and open learning environment.

The second scenario sees a period of connection, whereby LMS products start to open their services for use within the open learning environment. A number of universities, including Brighton have offered access to social software to all students and have encouraged students to use this space for recording all of their achievements, regardless of the context of learning (Attwell, 2007). But these educational organizations will remain using LMS, like Blackboard. System is integrated with student records system, personnel systems and Community@Brighton² (using Elgg software) with single sign-on, and Blackboard modules can link through to Community areas and vice versa. For some time, this scenario might be the most likely to happen, it is soft transitional phase between two directions where the development of learning environments may move. And it has its own advantage, the support of administrative issues, is strong. But this scenario contains lack of sustainability, one day the final choice, LMS or open learning environment, has been made.

The third scenario suggests that Open Classroom 2.0 will make revolution in education. LMS' will be not mainly used by the educational organizations; the educators will develop Open Classroom 2.0 for themselves. It might be also that LMS' and Open Classroom 2.0 will have parallel lives, with the last one becoming a dominant design in the space of informal learning and some types of competence-based learning, with the LMS remaining the key technology of formal educational systems (Wilson,

¹ <http://www.blackboard.com/>

² <http://community.brighton.ac.uk/>

2006). And it might also be that schools or other educational organizations develop their own official Open Classroom 2.0 and therefore provide support for teachers.

The last scenario might lead us toward to the schools, which do not provide any virtual learning environment for their students, teachers or staff. Open Classroom 2.0 should be the result of the course, not as an input. Every learner or teacher creates the environment that is needed for the tasks to be performed. For the administrative issues also every teacher has to look for the most suitable choice for him/her. This scenario will not be difficult for students, as the most of the social software is intuitive to use, this generation youngsters will find them easier to use than LMS' provided by the schools now, but probably for this scenario our educators are not ready yet. As Terry Anderson (2006) have said, although there is something quite compelling about the vision of a lifelong learning environment that is centred upon and perpetually belongs to the learner, we are some distance from being able to operationalize that vision. For the start, developing the Open Classroom 2.0 is to immerse teachers in those environments in teacher training. If teachers do not use such Open Classroom 2.0 aspects in their own learning process, it is not likely that these elements will be used in their teaching process with their students.

Building an Open Classroom 2.0 for teacher training is not an easy task. Teachers are all heterogeneous and with different needs, habits and competencies. Some teachers would like to have more collaborative work; others would like to participate in face-to-face seminars; nearly half found that open learning environment is good and the same amount found it confusing. It is complicated to find teachers, who could be ready to entirely move over to open classroom and leave the LMS behind, which provides more support in administrative and management aspects. Additionally, most of the teachers' technical preparedness is not enough to run courses in Open Classroom 2.0. Chen et al (2008) have pointed out reasons, why many of the teachers are not ready to give up using LMS and barriers that keep teachers from integrating Web2.0 into the classroom: lack of resources and support from districts, administrators, fellow teachers, and parents; the ability to protect identity online; some students may not have a clear foundation in using the Internet and Web 2.0 tools, also safety issue appeared to be the primary concern.

E-jump 2.0 project

The e-Jump 2.0 project is a European Commission Transversal Project: *Implementing e-Learning 2.0 in everyday learning processes in higher and vocational education*. The project is co-ordinated by the Estonian Information Technology Foundation (EITF). The partners are the Central and Eastern European Networking Association (CEENet); University of Turku/Centre for Extension Studies; Foundation for the Open University of Catalonia; University of East London; University of Tartu; Tallinn University; the University of Porto and the European Association of Distance Teaching Universities (EADTU).

e-Jump 2.0 aim is to promote e-Learning 2.0 and raise the competence and confidence of teachers by developing three electronic training courses for the teachers and other staff of higher and vocational education. The e-Jump 2.0 project has involved over 120 participants from East and West Europe, Central Asia, the Far East and China in the development of three courses which have focussed on new technologies of e-Learning 2.0, new assessment methods and aspects of design, implementation and evaluation. Developed courses are:

1. *New technologies in e-learning 2.0*. This course is centrally concerned with the design, development and evaluation of teaching, studying and learning processes that are supported by the use ICT and social media applications. The course content focuses on the use of Web 2.0 and in particular on the ways in which this allows users to create content in such a way that allows others to both read and write to a such a web environment. The course has utilised a range of software tools combined with a diversity of hardware devices, which have been used to promote access to learning resources within an open and flexible learning environment. Furthermore the course content has been structured around the pedagogically orientated themes of My Learning, Collaborative Learning, Mobile Learning and Multimodal Learning which has each formed one module at Advanced (Masters) level and credit rated under the European Credit Transfer System (ECTS). This course development has been led by Umeå University.

2. *New assessment methods*. This course emphasises a learner-centred view of assessment and the use of social media in assessment. It aims to create new opportunities for learning with social media and to

promote social interaction and a shift from a “knowledge-receiving” role as a student to an active and “knowledge-creating” one. The use of a wiki and process writing has aimed to make learning processes transparent and learning outputs as sustainable wiki-based articles. It is seen that assessment, rather than teaching, has a major influence on students’ learning. Assessment practices direct attention to what is important and have a powerful effect on what students do and how they do it. This course is also credit rated under ECTS and has been led by the University of Turku.

3. How to Design, Implement and Evaluate an E-Learning Project. This course focuses on the aspects of design, implementation and evaluation, which are seen as the three fundamental axes, that constitute the process of developing e-learning projects. Every action related to them has consequences in order that the final result matches the intended objectives and fulfils the stated criteria for quality and success. The main objective of the course is therefore the capacity building in concrete fields of action and decision taking. It has adopted a predominantly practical approach in which the learner and his or her active and collaborative tasks hold a fundamental role. The course is aimed at teachers in higher and vocational education, who are interested in developing or improving their skills in designing and implementing courses or learning units based on the use of virtual tools and environments offered through Web 2.0 tools and applications. In order to design, implement and run an e-learning project (program, course or unit) over a considerable amount of time with high indicators of quality, sustainability and acceptance, it is important to understand the main factors that influence in the development and the carrying out of such a project. This course is also credit rated under ECTS and has been led by the Open University of Catalonia.

After passing the above-described courses, participants have gained the theoretical knowledge, but also practical experiences and competencies, how to build their own Open Classroom 2.0 to be used in the context of primary, secondary, vocational or higher education. During the courses, teachers are invited to learn and use different software, as well as plan their own learning. Immersing teachers in such open classroom, supported by their peers, facilitators and tutors should be useful in reducing the initial fear associated to learning technology. Furthermore, participants shall feel more confident, autonomous, open to change and capable of incorporating the new technological knowledge to their practice.

Empirical study

The aim of the evaluation of the courses was to collect feedback that could help to analyze and therefore to update and enhance the courses and make them more suitable to the target group.

Methodologically design-based research was used in this study. Wang and Hannafin (2005) have defined design-based research as methodology aimed to improve educational practices through systematic, flexible, and iterative review, analysis, design, development and implementation, based upon collaboration among researchers and practitioners in real-world settings and leading to design principles or theories.

In this context, we design and implement some prototypical educational challenges on the basis of our current understanding of how open classroom can be initiated and supported within general and higher education. The empirical insights that we gain through our field research are then fed back into the next round of improvement and refinement of the overall course design. After evaluating and analyzing the first trial of the three eJump 2.0 courses, corrections will be implemented and the courses will run for the second time.

A Web-based evaluation questionnaire was prepared using an open-source system LimeSurvey³. LimeSurvey sends to each of the respondents the invitation to participate in survey with the unique access key to respondent’s e-mail address. Questionnaire was sent to 129 participants and 56 of them responded (response rate was 43%).

Questionnaire consisted of six blocks: background, online learning environment, learning resources, assignments, assessment and feedback and pedagogical design. Background information included the data about affiliation, occupation, age, gender, academic field, e-learning experience and attitude, web 2.0 experience and motivators. Five sections of the questionnaire were divided as online learning environment, learning resources, course assignments, assessment and feedback, pedagogical design and implementation. Each sectioned consisted of 8-10 statements and included 5-point Likert scale

³ <http://www.limesurvey.org/>

responses (Strongly agree, Agree, Neither disagree or agree, Disagree, Strongly disagree).

The participants of the courses were educators from Estonia, Portugal, Hungary, Finland, Spain, Sweden and United Kingdom. 63% of them were from university or other higher education institution, 9% were from secondary school, 7% were from vocational school, 5% other academic network organization, 2% business enterprise and 14% of the participants were from other field. Occupations of the participants were divided so that 55% of them were teachers, 13% educational technologist, and 11% researchers. 64% of the participants were woman and 36% were men and the average age of them was between 26-40 years.

Three Web-based e-courses were developed and subsequently pilot-tested between November 2008 and March 2009. Learning environment of the course consisted of virtual learning environments Moodle⁴ and Elgg. Moodle was used for submitting assignments and learning tasks as links to the e-portfolio software Elgg, which were used to publish learners' assignments and reports. The group discussions about certain module were held in Elgg, group page. Each of the participants had one supervisor, who supported with the technical, but also conceptual issues, and tutor, who replaced the supervisor when needed. Each of the supervisors had about 5-6 students to supervise.

Results and discussion

The intention of this research was to collect feedback to the three courses, which were developed in the eJump 2.0 project in order to improve the courses.

About 47% of the participants disagree or strongly disagree that the learning environment should remain the same in case these courses will be for teaching again. About 36% of the participants agree or strongly agree that the environment should be unchanged. 38% of the participants admitted that the environment was not easy to navigate and almost 50% of them said that they got lost in the environment. The reason for unsatisfactory might be distributed learning environment that was consisting of many systems and the participants were not used to use, as they had previous experiences mainly with closed learning environments. Only 16% of the participants had used Web 2.0 tools before quite often and 27% of them had never used them before. It would be worth to take into consideration to reorganize the learning environment of the courses. At the moment there are two central systems – learning management system Moodle and e-portfolio environment Elgg. This was rather confusing to teachers; they got easily lost and were overlapped. One possibility is to give up using Moodle and to set the tasks into Elgg also. Other possibility is to keep the Moodle and teachers should be able to enter to the course with their own tools that suit the best with their needs and skills. The facilitator could offer the selection of different technical solutions and to provide support with technical services, but teachers should do the final choice.

Nearly 70% of the students admitted that the course introduced innovative pedagogical approach and they learned what is learning 2.0 from the pedagogical perspective. About 63% of them agreed that there was sufficient flexibility in course design for ensuring the autonomy of learners. On the other hand, only 32% of the students believed that most of the course participants were truly engaged in learning. From the self-directed learning aspects, 60% of the participants found that course offered enough flexibility and self-directed learning opportunities for them ensuring the autonomy of learners, whereas about 40% of the participants desired more freedom. Teaching self-directed learning aspects to in-service teachers, is useful in order to show, how they can teach the same aspects to their own students, who should gain the competencies of self-directed learning as soon as possible.

Course assignments received also generally positive feedback. Although about 55% of the participants would have expected more collaborative assignments. Group discussions were held in group page in e-portfolio tool Elgg⁵, but other tasks were individual and that leaves the social aspect of the learning a bit behind. It would be useful to push the learners more into the activities like peer-evaluation.

Learning and teaching in Open Classroom 2.0 presumes that the students will receive all the needed tutoring, scaffolding and feedback either in technical issues or conceptual matters. Half of the learners, who participated the courses, admitted that they felt the facilitator's presence on this course, (s)he

⁴ <http://moodle.org/>

⁵ <http://www.elgg.org>

was responding quickly when needed and feedback was sufficient. 60% of them received the facilitator's feedback timely to each of their contributions. However, almost the same amount of the participants did not get the needed support and feedback or it was not sufficient for them, which might be one of the main reasons, why there was some dissatisfaction towards the course. It follows that learners need more support in the beginning of their studies and less, when they are experienced learners in online learning environment. At first they need also support in technological issues additionally to conceptual aspects and the need for help decreases with every new experience. If the support and facilitation is not active by the facilitator, the learners may feel not motivated and lose their path. Feedback in an online classroom is more important than in a face-to-face class; if not told exactly how they are doing, students have no other non-verbal cues to go on (Vrasidas & McIsaac, 2000).

Many learners need help when they first enter to the online learning with no immediate signposts or recognisable help. In most cases there are FAQ pages and help call numbers, and supposedly a tutor who can provide online support. Nevertheless, how about learners coming into the online environment at exactly the point where they can be challenged and motivated enough to press onwards, but not to the point where they quickly lose impetus and crash out of the programme, asks Steve Wheeler (2008) and emphasizes the importance of scaffolding in online learning. The value in scaffolding lies in its ability to support student's learning (Roehler & Cantlon, 1996). Giving learners feedback and providing scaffolding in order to guarantee interaction between learners and facilitators is an important aspect. Studying in web-based course and in Open Classroom 2.0 requires more motivation from learner and this study demonstrates that learners feel more motivated when they received feedback and guidance in their weblogs from facilitators. Still, students can't expect that facilitator is online all the time. Reasonable is to agree on the schedule of feedback in the beginning of the course, which would be suitable for both sides.

Gilly Salmon (2001) says, "For online learning to be successful, participants need to be supported through a structured, developmental process" and she offers her *Five Stage Model of E-learning* as a scaffold for this. According to this model, the first stage is *Access & Motivation* - at this stage activities need to provide a gentle but interesting introduction to using the technological platform and acknowledgement of the feelings surrounding using technology and meeting new people through the online environment. Second stage, *Socialization*, is for building bridges for and between participants. In stage three, *Information Exchange*, information can be exchanged and co-operative tasks can be achieved. Participants' learning requires two kinds of interaction: interaction with the course content and interaction with people. In this stage, participants are getting used to being online and they can start to work with some colleagues. By the stage four, knowledge construction, participants frequently start to recognize one of the key potentials of text-based asynchronous interaction and take control of their own knowledge construction in new ways. In this stage, facilitator should encourage group members to question theory and practice e.g. links (or lack of connection) between theory and work-based practice. Lastly, at stage 5, *Development*, participants become responsible for their own learning and that of their group. They build on the ideas acquired through the activities and apply them to their individual contexts. By now, participants will stop wondering how they can use online participation and instead become committed and creative. They also become critical and self-reflective.

The peers can offer the support through peer-assessment or collaboration also, as the Open Classroom 2.0 provides lots of possibilities for networking and communities. Learners can follow the activities their peers are performing and let others know about their activities. All the content related to a user can also be tagged with key-words, which would allow for sharing of the knowledge within each user's learning network. Addition to that, when contributing in discussion forums shaped around a particular learning area or task, learners will, again, find an opportunity to externalize their tacit knowledge and participate in collaborative learning. This leads us to the importance of social presence in online learning environment.

Short *et al* (1976) supposed that social presence represents the perception that one is communicating with people rather than with inanimate objects. This is despite being located in different places where all communication is digitally mediated. Tu (2002) has argued that social presence can be defined in terms of a combination of social relationships, communication styles, task analyses, feedback levels and measures of immediacy. Social presence is a vitally important component of any learning situation, and doubly so in electronically mediated contexts. According to Short *et al*, when social presence is low, group members feel disconnected and group dynamics suffer. Conversely, when social presence is high, members should feel more engaged and involved in group processes. The interaction of learners with each other through technology promotes their own social presence online which facilitates more

effective learning (Collins & Berge, 1996).

Terry Anderson (2006) has suggested that one of the difference, but also advantage, between open learning environment and LMS, is the social presence in the first one. Furthermore, Schaffert & Hilzensauer (2008) believe that the community and the social involvement in open learning environment is the key for learning process and the recommendations for learning opportunities, whereas LMS provides limited group work, focus' on the closed learning groups inside of it and collaboration is not primarily in the focus. In spite of the advantages of Open Classroom2.0, however, some students experience frustration and even drop out of online courses due to the lack of live interaction resulting from physical separation from the instructor and peers (Naidu, 1994).

One of the advantage of Web 2.0 and social media tools and services is the networking and social aspect, which should be exploited in learning activities. Students need a place to mix socially and learning environment or learning activities should provide this kind of facility. Only individual tasks leave the communication with peers behind. Although the Elgg environment or any other social media tool provide good possibilities for interaction and discussions, the initiative should come from a teacher/facilitator at first in order to develop the habit of collaboration and conversation between peers, but also between facilitator and learners.

Conclusion

Our experiment demonstrated that ideas and practices related to the Open Classroom 2.0 can be successfully introduced to teachers through the immersive learning. However, it is important that the sufficient amount of support and scaffolding is provided to learners; social presence is be monitored and increased by the facilitators and peers, self-directed learning aspects are be used so that teachers can see the benefits of the new learning environment in their everyday practice.

References:

Anderson, T. (2006). *PLEs versus LMS: Are PLEs ready for Prime time?* In: Virtual Canuck – Teaching and Learning in a Net-Centric World. <http://terrya.edublogs.org/2006/01/09/ples-versus-lms-are-ples-ready-for-prime-time/>

Attwell, G. (2006). *Personal Learning Environments*. <http://project.bazaar.org/2006/06/01/personal-learning-environments/>

Chen, P., Wan, P. & Son, J. (2008). Web 2.0 and Education: Lessons from Teachers' Perspectives. In G. Richards (Ed.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2008* (pp. 2555-2559). Chesapeake, VA: AACE.

Collins, M., & Berge, Z. (1996). *Facilitating interaction in computer mediated online courses*. Paper presented at the FSU/AECT Distance Education Conference. Retrieved February 7, 2006, from <http://www.emoderators.com/moderators/flcc.html>

Klamma, R., Chatti, M., Duval, E., Hummel, H., Hvannberg, E. H., Kravic, M., Law, E., Naeve, A., & Scott, P. (2007). *Social Software for Life-long learning*. *Educational Technology & Society*, 10(3), 72-83.

Mayfield, A. (2007). *What is social media?* http://www.icrossing.co.uk/fileadmin/uploads/eBooks/What_is_social_media_Nov_2007.pdf

Notess, M (2009). *Not Dead Yet. Why the Institutional LMS is Worth Saving*. <http://www.elearnmag.org/subpage.cfm?section=opinion&article=118-1>

Naidu, S. (1994). Applying learning and instructional strategies in open and distance learning. *Distance Education*, 15(1), 23-41.

O'Reilly, T. (2005). *What is Web 2.0*. <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>

Roehler, L. R., & Cantlon, D. J. (1996). *Scaffolding: A powerful tool in social constructivist classrooms*. Retrieved July 18, 2007, from <http://ed-web3.educ.msu.edu/literacy/pdf/scaffolding2.PDF>

Salmon, G. (2000) *E-moderating*, Kogan Page.

Schaffert, S., Hilzensauer, W. *On the way towards Personal Learning Environments: Seven crucial aspects*. eLearning Papers, N° 9, July 2008, www.elearningpapers.eu., ISSN 1887-1542, 11 pages

Short, J., Williams, E. and Christie, B, (1976) *The Social Psychology of Telecommunications*. London: John Wiley and Sons.

Tu, C. (2002). *The measurement of social presence in an online learning environment*. International Journal of E-Learning, 1 (2), 34-45.

Vrasidas, C. & McIsaac, M. S. (2000). *Principles of pedagogy and evaluation for web-based learning*. *Educational Media International*, 37(2).

Wang, F. & Hannafin, M.J. (2005). *Design-based research and technology-enhanced learning environments*. Educational Technology Research and Development, 53(4), 5-23.

Wheeler. S. (2008). *Digital scaffolding* (<http://steve-wheeler.blogspot.com/2008/11/digital-scaffolding.html>)

Wilson, S., Liber, O., Beauvoir, P., Milligan, C., Johnson, M. & Sharples, P. (2006). *Personal Learning Environments: Challenging the dominant design of educational systems*. http://dspace.ou.nl/bitstream/1820/727/1/sw_ectel.pdf

Woods, P. (1980) *Pupil Strategies: Explorations in the Sociology of the School*. Croom Helm, London.