

Conclusions and Recommendations on Teaching and the Use of ICT

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General considerations

1. There is a consensus that the effective and widespread use of information and communications technology (ICT) has great potential for enhancing learning opportunities and its quality, especially in distance, open and flexible learning. More research and evaluation of practice is needed to determine that universal application of (ICT) is always desirable for educational quality.
2. Teachers are crucial to successful use of ICT. Teachers will be required, and should be positively encouraged, to assume new roles and responsibilities if ICT is effectively applied to enhance teaching and learning quality.

Initial teacher education and continual professional development

3. Initial teacher education for all teachers should include compulsory ICT training to an adequate level of competences and skills.
4. Partners should work towards the objective that all teachers should have the right to a minimum amount of continual professional development (CPD) on ICT skills in the course of their careers, the amount to be determined in negotiations between educational authorities and representatives of teachers' organizations. This right is conditional on adequate State financing.
5. Countries should examine advantages and disadvantages of policies on compulsory CPD concerning ICT for young teachers in the first two years of their career, provided the appropriate conditions for equal access are met by the State.
6. Funding for CPD is primarily the responsibility of governments. Co-financing between national or local authorities, public or, where appropriate private schools, and teachers should be the subject of negotiations.
7. Partners should work towards establishing conditions for equitable co-financing arrangements in which teachers participate when CPD is linked to career development incentives. Linkages between CPD, salaries and career development incentives should be negotiated between educational authorities and teachers' organizations.
8. Time for the purpose of CPD should be guaranteed in employment contracts of teachers, as well as collective agreements concluded between education authorities and unions

9. The content of CPD for ICT competences should be the subject of consultations and/or negotiations between relevant partners, including training providers, professional associations and trade unions to ensure relevance, feasibility and effectiveness. Ultimate decisions on content should remain with governments who fund and establish standards and objectives as part of overall education policy. There should be a national consensus on the framework, and local consensus on the detailed contents based on needs.

10. CPD provision for ICT competency may be assured primarily by governments, but also through a mix of public and private providers. Delivery mechanisms should include distance learning options such as Web-based portals and e-mail exchanges.

11. Affirmative action, including “positive discrimination” policies should be considered to ensure equal gender access to CPD to account for heavy family responsibilities for most women teachers, as well as addressing the special needs of older teachers.

12. Policies on CPD should formally accredit ICT competences acquired in non-formal or informal settings with a view to value learning, including transfer of skills and competences, and to increase cost efficiency.

Infrastructure, workload, work organization and safety and health

13. Investments should be based on an integrated approach in implementing ICT strategies, including the four major components - hardware, software, communications provisions and trained human resources, and should be assured on a sustainable basis. Where public/private partnerships to complement public sector investment are applied, they should not be undertaken in conditions of monopoly domination of hardware or software. Open source software should be considered where possible.

14. Teachers should have adequate planning time as part of their work obligations to ensure they are able to introduce ICT into their pedagogical practice which favours high quality and appropriate learning. Additional planning time will need to be decided with due regard to resource implications and organization of schooling, and may be the subject of negotiations between authorities and teachers’ organizations.

15. For technical/professional support, including electronic networking, schools should benefit from help desks, ICT systems’ managers or ICT specialists.

16. Introduction and use of ICT in teaching and learning methodology is sometimes stressful and hinders use of new technology. Additional research is needed on the impact of teachers in relation to their training, their hours of work and the working environment preparatory to making adjustments which will reduce stress. Changes in working conditions should be negotiated with teachers and their representatives.

17. New teaching methods - collaborative, team teaching - should be encouraged, but new pedagogical models should be further researched and piloted before widespread introduction.

18. It is desirable to keep class sizes at levels that allow teachers to give learners individual and/or small group attention for full and effective students' learning through ICT use, within resource constraints. Authorities should examine the possibility of major improvements in schooling enabled by ICT.

19. The use of teacher assistants in classrooms may be considered to help teachers, provided that they are not employed to take over the teaching functions of qualified teachers.

19a. An ICT implementation plan should be promoted as part of schools' development plans. The role and commitment of school leadership is crucial to realizing this objective.

20. Health and safety - a safe working environment - should be ensured when introducing ICT equipment, especially avoiding risks from radiation or improper ergonomics. Government regulations, and negotiated solutions should be sought to ensure this goal of protecting staff.

Social dialogue processes for ICT introduction and use

21. Social dialogue between educational authorities, teachers and their organizations in the first place, and other stakeholders as appropriate, is a crucial means to obtain full ownership and application of ICT in teaching practice. Social dialogue is understood to mean full information sharing, consultation and negotiations or collective bargaining according to the issue.

22. Consultations on ICT use within schools based on informal networking between teachers should be encouraged as essential to practical resolution of problems. Informal processes should be considered as complementary to formal processes of consultation and negotiation established by law, collective agreement and national practice.

23. Formal mechanisms for social dialogue on educational decisions, including ICT, should be established between educational authorities and teachers' organizations on a regular basis, where they do not already exist. Such mechanisms should be based on transparency, full sharing of information and good faith in consultations and negotiations on the part of both authorities and teachers' organizations. Mechanisms should exist at all levels of decision-making - national, regional, local and institutional.

24. The issues subject to the appropriate form of social dialogue will be determined by national law and practice and respect for European and international standards on principles and rights. Basic educational policy may be more appropriate for information sharing and consultation. Salaries and other conditions of employment and service should be determined by collective bargaining.

25. Teachers' organizations should establish internal mechanisms for full dissemination of information on the outcomes of social dialogue to their members so as to ensure understanding and acceptance.

26. Students and parents through their elected representatives in school councils/boards, and other educational stakeholders, should be fully involved in school decision-making, including ICT. School leaders are also crucial to social dialogue.