The ASEM Forum on Lifelong Learning gave a fresh contribution to the discussion about how to define 21st century competencies. On the basis of this Forum, the ASEM LLL Hub Secretariat has made the following recommendations: 21st century competencies should enable us to master interdisciplinary approaches for creative problem solving in specific contexts. Success thus requires respect for learning cultures. Across the ASEM countries and across different learning cultures, there appears to be an established consensus on the need for investment in ICT pedagogy, on what is adult educators core competencies, and on a concerted effort to identify which competencies future lifelong learner must be able to acquire by using digital technologies.

By Claus Holm, Chair of ASEM LLL Hub, and Anders Martinsen, Head of ASEM LLL Hub Secretariat

ASEM countries are challenged in making its citizens capable of living in a society characterized by constant change. This brings along an imperative that briefly is articulated by the phrase ‘you must learn to change your life’. That is to say that you not only have to learn to change yourself throughout your life, but also that learning is about life and for life. The reasons for this ever-formulated demand for change by developing competencies are different - from technological changes to global and local crises of both climate and economic nature to multicultural communities arising through migration, etc. The consequences are that the individuals, institutions and states across the world are changing and improving their educational efforts to better match the future society. In short: Education is now a question about preparing people to meet future challenges; it is not only a question about performing known and well-defined functions. But how is this done in the best way? How to formulate strategies for the competencies that are needed in the future? How to deal with technological development? And how do strategies in the best way possible take account of the difference of learning cultures when 21st century competencies are being formulated?
From 3-5 October 2016, the ASEM LLL Hub held the biennial ASEM Forum on Lifelong Learning with the title 21st Century Skills at the Danish School of Education in Copenhagen, Denmark. This contributed to the following research-informed recommendations in three main areas:

1. Recommendations for how to implement new strategies for the realization of 21st century competencies in Europe and Asia.
2. Recommendations for whether new digital ‘drivers’ are creating major shifts for all students in the educational landscape in the 21st century.
3. Recommendations for what the differences in learning cultures in Asia and Europe mean for the formulation and implementation of 21st century competencies in relation to adult educators.

If you read the three questions, you quickly become aware that there is a difference between the language used in the title of the Forum and the areas above. The reason for this is that the Forum was partly influenced by a discussion about the importance of talking about knowledge, skills, education (or bildung or formation) and competency and partly reflected that the world is preoccupied with identifying competencies for the 21st century.

1. **HOW TO IMPLEMENT NEW STRATEGIES FOR THE REALIZATION OF 21ST CENTURY COMPETENCIES IN EUROPE AND ASIA?**

New strategies for the contribution of the states and the universities to the 21st century global citizens are met with a sense of urgency. If the education system does not get it right, the needed competencies will not be available, economy will operate below capacity, people will be unemployed, investment in education will be a waste of money, etc. On the other hand, there is also an invitation to reflect on two matters. The first of these is that you cannot easily change the traditional ways of doing things. The second matter is that not all processes of change and solutions are equally suitable for the different countries. Overall, this means that if you want to get a good result you often have to be careful in standardizing and accelerating the implementation of the change. So with these considerations in mind what can be recommended in relation to the question about which strategies should be implemented for the realization of 21st century competencies?

1. **Invest in pedagogy** in order to make use of evidence that informs us about how to learn in the best way in a world characterized by 1) the constant and demanding requirements for escalating competencies through learning, 2) use of interdisciplinary and collaborative approaches – competencies - for problem-solving and 3) requirements for creative problem solving in learning cultures that are future-oriented, willing to risk and trial and error-oriented.

2. **Define 21st century competencies** on a joint macro-level, but make sure that it does not happen on the expense of the local integration and interrelation of education. So
on the one hand there is a need to clean up the taxonomy mess, so that we can speak the same language about 21st century competencies. And on the other hand there is also a need that the idea of speaking 'the same language' does not lead to a lack of recognition of differences within and across countries in terms of learning traditions and learning cultures. It is the difficult, but important, art of balance that here must be mastered in order to implement successful change and stabilization processes.

2. **ARE NEW DIGITAL ‘DRIVERS’ CREATING MAJOR SHIFTS IN THE EDUCATIONAL LANDSCAPE? AND HOW SHOULD WE MAKE SENSE – SPEAK – ABOUT THESE KINDS OF POSSIBLE SHIFTS?**

There is consensus that digital drivers are contributing to a shift in methods used for teaching and learning. This vision has for at least 30 years been a driver for heavily investing in getting ICT-systems in place. The consequence is e.g. that open course ware and similar tools via ICT globally turns curriculum into the same. But one thing is the technology and the tools. In many places it is in place. The next step is to identify the types of pedagogy that determines whether the technology is being used to turn all students into masters of adaptability and adjustment as well as masters of control and use of ICT-facilitated changes. So with this technological development and investment in ICT-systems, the question is what kind of educational efforts that are needed in order to have all schools, teachers and students become a part of an ICT-related competency development in educational institutions as well as on work?

1. **Invest in ICT-pedagogy.** The digital technologies create openness, but the question of which pedagogy is required for this openness is to be answered. The traditional classrooms and more general conception of education has been, and is, associated with closed classrooms, limited in time and space, within four walls and where access to information is by the use of the book as a learning medium. The new classrooms are open, pierced by digital media, which sometimes interfere with concentration in space, but also provide new opportunities for interaction with the outside world. So the educational challenge is how to exploit the digital resources, so there will be the possibility for an open classroom and for that matter also an open workplace where it is possible to access more knowledge and information than ever before. The educational gap, or in other words educational challenge, - requiring skills of both teachers and students, employers and employees - is to learn to find it, use it and store it in competent ways.

2. **Modernize the pedagogical language for basic competencies.** It is necessary to expand our knowledge of, and language for, what basic competencies are in relation to digital technologies. We know that e-learning is changing schools, teachers and students and the learning environment. But our pedagogical language and handling
of these ICT-resources are lagging behind. So in which way should e-learning change the way we comprehend what the core competencies are and in which social settings that we use these? Traditionally we talked about the basic competencies as reading, writing and arithmetic. But will these basic culture techniques be replaced or simply supplemented because of the new digital technologies? Should we, for example, not just talk about reading, writing and arithmetic, but also about exchange (cooperation), expressing oneself (self-improving) and exploring (to innovate)? Evidence-based answers are required in relation to these questions.

3. **Be aware of a new kind of social inequality.** New technologies are connected to the challenge of a new kind of social inequality. Digital technologies are driving changes in schools, in the educational system, but also outside the educational system, e.g. in relation to the workplace learning. The technologies expand the scope for accessing learning resources and make new kind of connections, but also create well-known dangers of marginalization for some categories of students and workers. So the danger is a digital divide that both changes, but perhaps also maintains and at worst reinforces inequality.

### 3. WHAT DOES THE DIFFERENCES IN LEARNING CULTURES IN ASIA AND EUROPE MEAN FOR THE FORMULATION AND IMPLEMENTATION OF 21ST CENTURY COMPETENCIES IN RELATION TO ADULT EDUCATORS?

It is often said that Asian learning cultures emphasize self-knowledge and shared social responsibility, while European learning cultures are emphasizing creativity and innovation at work. We know on the one hand that there is of course a risk of exaggerating the differences between education in Asian countries and in European countries. But on the other hand differences are present – and these differences should also be kept in view for 21st century competencies that tend to be formulated as more holistic and future-oriented. So the challenge is to answer a question like: What do the differences between learning cultures mean for the way you comprehend and interpret the question of adult educators’ development of 21st century competencies? This is an open, but also pressing question to be further clarified.

1. **Learning cultures matters!** So be careful and precise when using terminology concerning 21st century competencies because meaning may differ between and across fields, cultures and institutions. Said in another manner: Cultural differences can be documented as having an impact on the perception of the adult educators’ competency profile. Even so it is possible to find important similarities.

2. **The adult educators core competences.** It seems to be possible to sum up that a competent adult educator must be able to:
• communicate the subject matter to adult learners in an understandable and inspiring manner using the appropriate pedagogical methods;
• relate to the learners’ preconditions taken in a broad sense;
• create a constructive learning environment characterised by commitment, confidence and tolerance, and positive relationships among students and between students and teacher; and
• reflect on his or her own experiences in order to constantly improve performance and learning outcomes. (Source: Adult educators’ core competences, written by professor Bjarne Wahlgren, published in Int Rev Educ, 2016, 62: 343-353)

Most of these competencies are related to teaching and learning, but competencies are more than that. Competency means the ability to offer qualified performance outside the education sector in specific contexts. Accordingly it is just as important to teach students to apply what they learned in future practice as it is to teach them to learn.