Skills and Learning in the Knowledge Society

Abstract

Ilkka Tuomi
EU eLearning 2007 Conference
Lisbon 16 October 2007
Skills and Learning for the Knowledge Society

Policy makers and business strategists often successfully use concepts that are ambiguous. Such "cryptic concepts” allow many interpretations, and therefore many actors can coordinate their activities around the same concept without explicitly contradicting each other. Cryptic concepts can link multiple discourses into a world that is shared across different language genres and communities of practice.

eSkill is such a concept. It is therefore important to ask what the different interest groups mean by the concept. Can the concept of “skill” can be used to make practically important distinctions in the knowledge society? Does the concept of skill emerge and operate in a historical world that does not exist anymore?

I shall argue that the traditional individualistic concept of skill is based on a model of learning and knowledge that is inaccurate in the networked knowledge society. The conventional concept of skill belongs to a socio-economic era of industrial mass-production. An ethnographic study on the nature of human skills inside and outside organisations reveals that skills are socially and socio-technically distributed. As the society is now becoming increasingly networked through information and communication technologies, it becomes clear the conventional concept of eSkills neglects fundamental trends in the Knowledge Society. We need to re-evaluate the motivations and conceptual foundations that underlie eSkill policies.

Alternative Perspectives on eSkills

Policy makers, educators, industry actors, and individuals all have their own interests in the cryptic concept of skill. For high-quality policy, it is important to explicitly ask who is talking, and why. The presentation discusses internal and external motivations that emerge in the various communities of practice.

Given that multiple interests are real and influence policy, one may ask whether there exists a specific point of view that could or should dominate policy discourse. I shall argue that a good candidate, indeed, exists. This is based on a human-centric view on learning.

Towards a Human-Centric View eSkills

Skills are something that are gradually acquired through learning. We can therefore try and put an individual learner at the centre of the picture, and ask why such an individual would want to have eSkills, or any other skills.

Skills are capabilities that enable action. Individuals acquire capabilities for four important reasons. First, skills enable access to economic opportunities. Broadly understood, economic opportunities encompass both labor and work, the former in the Arendtian sense of maintenance
of households and life, and the latter in the sense of production of goods and services that can be exchanged.

Second, skills enable access to meaningful social interaction. We need skills to become individuals in a social context, and our individuality exists only in social interaction. Without meaningful social interaction, life becomes meaningless.

Third, skills enable access to human development. Such skills are useful and necessary when imagined and real worlds are bridged, and when dreams are made true. Although skills that enable human development are critically important for individuals and societies, they can be discussed at a policy level only in the context of a broader theory of human development.

Fourth, skills are sought for security. This includes social and economic security, and also physical security. Skills are important for reducing and managing risks.

To the extent that policy is about social development, policymakers may ask why specific skills become relevant and interesting in the Knowledge Society, and what is the impact of skill-related policies on these different dimensions.

Policies that promote the use of information technologies need to explicate how they address these dimensions.

**Skills As Expressions of Industrial Age**

Typically skills are defined in the context of the industrial society. The Industrial Age was characterised by social stability that enabled business firms to produce standardized goods and services. The underlying organisational models were based on routinized processes that aimed at efficient large-scale production. In the industrialising societies, economy was based on scarcity, basic needs and demands were similar for large segments of the society, and mass production effectively addressed key social and individual needs. Social mobility across domains of knowledge and work practice was rare, and social distribution of labour was relatively fixed.

Paradoxically, the industrial world was full of novelty and invention because it was “cognitively stable.” Novelties were possible, as they become visible against a cognitive background that changed slowly. Professional skills had a life-span of decades, and often they were intergenerational.

The conventional concept of skill is tailored to meet the needs of mass production and routinized processes. A closer ethnographic look at the nature of work skills, however, reveals that the capability to get a specialized job done cannot easily be described using the traditional concept of skill. The concept rests on a balance that links together products, production methods, tools, and social division of labour. As long as this balance exists it is easy to define the required skills and teach them to new workers. In knowledge work, the delicate balance between product characteristics, tools, and labour becomes dynamic, however. Skills become dynamic and socially distributed. What we call a skill in the Knowledge Society, in effect requires
mobilisation of social networks with diversified capabilities and accumulated resources. The traditional concept of skill assumes that it can be found from an individual, and described using knowledge about that specific individual. In practice, when we use “our skills” we often borrow cognitive capabilities and resources from others.

Furthermore, skills are also distributed among human and technological actors. When we express a skill, we don't only recruit others to help us conduct skillful action; we also use knowledge and resources embedded in technical tools.

Most skills only exist in a technically augmented actor: a technologically enabled human. They cannot be found by looking only the characteristics of the human part of that actor. Furthermore, a definition and characterisation of a skill only has ontological validity within a specific community of thought and practice. Therefore, a skill cannot be found by looking for it from the outside the community in question, from a universal or society-wide point of observation.

**Decoding the Concept of Skill in the Knowledge Age**

As a result, any simple cataloguing of society-wide “skill-gaps” remains inadequate. As skills are contextual and socio-technically distributed, there is no universal arithmetic that could be used to aggregate skills.

Useful definitions of generic skills do exist. By definition, such generic skills, however, are rarely associated with concrete technologies at hand.

In an innovative, unstable, networked and diversified society, it does not matter much where the “locus” of skills is. Instead, what matters is the actor's capability to rapidly acquire and mobilize knowledge, capabilities and resources.

Skill-related policies, therefore, need to expand the conventional view and focus on capabilities. The networked knowledge society radically changes the costs and benefits of social distribution of cognitive labour, and the networked nature of skills is becoming increasingly visible. The best experts today are people who can ask the right people and access the right sources of information and knowledge. Skill development, therefore, often means facilitation of social collaboration, access to meaningful activities that allow learning and capability accumulation, and development of social capital that can later be recruited for skilled action.

Policies that support skill development in the Knowledge Society, therefore, need to focus on learning as development of human capabilities, realizing that these capabilities are fundamentally social and socio-technical. The human-centric approach to learning does not try to address the needs of the Industrial Age by transferring existing knowledge into the minds of learners. Instead, it enables the development and realisation of important and useful capabilities in a changing world where innovation, knowledge creation, and communication can lead to individual and social development.