

EVALUATION METHODS AND VISUAL APPROACHES IN EDUCATIONAL SETTINGS

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EVALUATION CULTURE IN ORGANIZATIONAL CHANGE OF SCHOOLING

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Abstract. Niklas Luhmann speaks for communications as constitutive for social systems, and operationalizes culture as variety of systemic self-descriptions, conditioned by the structural embedding of the observing system. Viewing social systems as closed in terms of their regulation and operations, which are communications and nothing else, makes it possible to define limits for educational interactions. Communication, however, requires unity of three selections: information, utterance and understanding. Societal communication of education and schooling observes problems and available functional resolutions in reference to the notion of 'life course'.

To enable various system references to be distinguished, Luhmann called the 1) observation of the overall system = function, 2) the observation of other systems = performance, and 3) the self-observation of a system = reflection. Thus, the three logical possibilities for observing education in particular are: (1) The system observes its societal function in forming human minds and the related code of communication. The code of transmittable/not transmittable of contents of education and schooling has led to specification in terms of credentialing schooling, coded (graded examinations) to communicate and observe in terms of better/worse. (2) The performances (e.g., hard and soft skills) are observed in relation to other subsystems or in relation to changes of students' minds (development). (3) The reflection uses reflection theory, i.e. pedagogical theorizing, and special semantics of process reflexivity to deal with pedagogical interactions as well as with making organizational decisions on education and schooling.

Our claim is that the evaluation culture of education and schooling deals with intensification of self-descriptions and external descriptions. The latter means that educational communication's performance, in formative or summative terms, is also observed and described by other subsystems (e.g. politics, law, economy, science, religion), and by the external environment of the learning minds. Expanding evaluation establishment offers structural couplings between education system and other function systems, psychic system included. We argue for a fruitful systems theoretical way to conceptualize the emerging evaluation culture, in the framework of studies of organizational changes of schooling.

Firstly, we describe the developments in educational evaluation establishment in Finland. This was a switch from inspection culture to evaluation culture. Introducing a national model for curricular and thematic assessments was to ensure equality in different parts of the country. In the Finnish evaluation framework (1999), the sample-based assessment has been an essential component. European Union common indicators, including learning to learn as a part of educational attainments, was taken into account. Secondly, we focus on information offered by educational credentials, and concerns of their comparability in the wave of PISA, Key Competencies and 21st Century Skills discussion. The empirical issue considers assessing these as added-value measures in relation to the information offered in discipline based graded credentials. The latter are essential information in transitions within educational systems. In form of structural couplings, they also perform as information offer for interpretation of other sub-systems. To increase nationwide trust on such information, Finnish evaluation establishment has found international assessments like PISA, as well as EU indicators, useful. Learning to learn is presently a part of the transversal competencies of the Finnish National Core Curriculum for Basic Education as well as one of the Key Competencies of EU. Thirdly, we analyze some practical outcomes of extended assessment and expanded basis of evaluation in Finland. Finally, we consider Luhmannian working model's suggestion that general-domain competences like 'learning to learn' are expressions of the substituting the historically preceding notion of general education (e.g. Bildung in German) by novel "contingency formula" which emphasizes capability of knowing (i.e., competencies) instead of pre-structured knowledge contents.

Keywords: Systems theory, education system, evaluation culture, learning to learn, information of credentials

Introduction

Global evolution of education system with regional features and nation-state specific organizational characteristics has inspired sociological approaches for describing and explaining the long-term development of schooling. Presumptions at the level of general theory of sociology have framed the inscription of the cultural domain in the explanans of the explained change. We note three major suggestions in regards to culture. The neo-institutionalist approach assumes institutionalized world-cultural beliefs effectively permeating regional boundaries in expanding organized schooling (e.g. Boli, 1989). The morphogenesis approach on analyzing change of the “multiply integrated state educational systems” (Archer, 1979), currently (Archer, 2012: 33) considers time (T) as theoretical construct for phases in two parallel cycles, where cultural domain intertwines – reflexively – with the cycle of structural conditioning (T1) of interactive agency (T2-T3), leading to the structural elaborations (T4). In this paper, however, we follow the sociological systems theory inspired by Niklas Luhmann to speak for communications as constitutive for social systems, and to operationalize culture as variety of systemic self-descriptions, conditioned by the structural embedding of the observing system. We conceptualize expanding evaluation establishment as part of the cultural conditioning (cf. Archer *ibid.*) on communicating decisions in organized education and schooling within nation-states (Luhmann & Schorr 1988; Luhmann, 2002 and 2018).

Objectives

Viewing social systems as closed in terms of their operations, which are communications and nothing else, makes it possible to define limits for educational interactions. System internal structures expect decisions being informed by pedagogical theory and by observations of the pedagogic practice. Continuity of systemic communication, however, require unity of three selections: information, utterance and understanding. The reproduction of such unity is self-referential, and these events are made more likely by relying on the societally (in the world society) recognized mediums of communication specific to functionally differentiated societal formats of communication (e.g. religion, politics, law, education, economy). Societal communication of education and schooling, as sub-system within the comprehensive social system of communications (i.e. society), observes problems and available functional resolutions in reference to the generalized notion of ‘life course’ while intending to its forming. Even though true communication events require understanding – to be confirmed recursively – this does not mean necessary agreement or compliance with the pedagogical intentions.

Methodology

The situational complexity of educational interactions is typically reduced by means of communicating organizational decisions; in local schools and within regionally or nationally differentiated school systems (from pre-school to doctoral schools) with their globally common and nationally particular features. Current society displays expanded and extended organization for schooling with complex performance expectations in their intra-societal environment as well as in their external environment consisting of human minds. Thus, we need to be clear on what is the reference system, when we observe the observations of the observing system of schooling. To enable various system references to be distinguished, Luhmann called the observation of the overall system = function, the observation of other systems =performance, and the self-observation of a system = reflection (Luhmann, *Theory of Society* 2013, p. 96; Luhmann & Schorr 1988, 35). Thus, the three logical possibilities for observing systems, for education in particular these are:

(1) The observation of the overall system, to which a subsystem belongs, means that the education system observes its societal function in processing (creating or forming, if you like) human minds and the related code of communication. The purpose to educate through social forms that keep the generalized notion of life-course as observable is, however, twofold. Thus, the general code of transmittable/not transmittable of contents has led to specification in terms of credentialing schooling, which communicates as coded (school examinations and credentials) to observe in terms of better/worse; (Luhmann, 2002; Kade, 2006)

(2) The observation of sub-systems in the intra-societal environment (or of other systems in the external environment), means that the education system observes the performances (e.g., hard and soft skills, if you like) in relation to other societal subsystems (e.g., economy, politics) or those performances, which are to be seen as changes of students' minds (development, if you like). The environment irritations via structural couplings (e.g. students signaling learning/not learning as inspirations, or poor achievements as deceptions) are not direct communications in education system, but need translations to system internal information, eventual translation or processing to educationally communicable knowledge, which always require time (e.g. interpreted conclusions from observable students' behaviors);

(3) The observation of the sub-system by itself (self-observation) means the reflection using the system's particular reflection theory (pedagogical theorizing covering also its relations with the disciplinary differentiation of the societal system of science), and the process reflexivity which deals with

pedagogical interactions as well as with making organizational decisions on education and schooling. Both operate in terms of special semantics, which, as a mode of observation, leads us to hypothesizing the expanding evaluation culture of education and schooling as potential intensification of both self-descriptions and external descriptions. The latter meaning that education system's performance, whether formative or in summative terms credentialing, is also observed and described by other societal systems (e.g. politics, law, economy, science, religion) and by the external environment of the learning minds. In this sense, the expanding evaluation establishment offers structural coupling between education system and its intra-societal- (other function systems) and extra-societal- (psychic systems) environments. The self-referential reproduction of communications with pedagogical intention, as such, do not require testing of psychic systems, but educational organizations observing its performances have assumed such concerns (auditing, accreditation, testing, assessing and evaluation) facilitating also irritation offers based on being observed by other sub-systems of the society. The latter assume historically varying emphasis in regards the assessment and evaluation of education.

Results

In this paper, we argue for a fruitful way to conceptualize the evaluation culture, in the framework of studies of organizational changes of schooling. To this end, we firstly, describe the recent developments in educational evaluation establishment, using Finland as an example. This was a switch from inspection culture to evaluation culture. Dissolving school inspection followed decentralization steps in Finnish educational system taken in 1980s and the 1990s. Responsibility for monitoring education was set upon municipalities. Introducing of national model for curricular and thematic assessments was to ensure equality in different parts of the country. In the national evaluation framework (1999), the sample-based assessment has been an essential component. European Union common indicators, including learning to learn as a part of educational attainments, were taken into account.

Then, secondly, we substantiate our point by focusing on information offered by educational credentials, and the concerns of their trustworthiness arisen in the wave of PISA and 21st Century Skills discussion. The issue at point considers assessing 'learning to learn' skills as added-value to the information offered in discipline based graded credentials. The latter are essential information in transitions within educational systems. In form of structural couplings, they also perform as information offer for interpretation of other sub-systems. School marks in disciplines are, however, not directly comparable; not even between schools and within

disciplines. Especially not in Finland, where no high-stakes national testing is in use before the transition to the higher education. In order to increase nationwide trust on information offer of the credentials, Finnish evaluation establishment has found international assessments like PISA, as well as EU indicators, useful. Learning to learn is presently a part of the transversal competencies of the Finnish National Core Curriculum for Basic Education as well as one of the Key Competencies of EU.

Discussion

We substantiate our considerations of the evaluation culture, thirdly, by referring to some practical outcomes of extended assessment and expanded basis of evaluation for the Finnish education system. In Finland, the National Board of Education has the exclusive rights to make core curricula for basic and secondary education. Municipalities make local interpretations within given limits. This led to asking, which of these instances should monitor educational outcomes? The outcome was in establishing a separate agency, The National Center for Educational Evaluation. This decision resulted in a new dilemma: if the agency assesses educational achievements, how to relate the results given in edu/psychometric forms back to curricula design, which deals with the form of content knowledge and qualitative goals for different years. The outcome was to include international assessments like PISA as well as European and national cross-curricular indicators, which could be used in comparing schools marks and increasing the flow of communications of not-directly-curricular educational outcomes. In addition, the Finnish learning to learn measuring was given an official status when making selection-related decisions on transitions to vocational education. If the official credentials are lacking, the psychometric assessment of 'learning-to-learn' competencies is used to give pseudo-credentials. Furthermore, adaptive testing technology could be deployed for acquiring even more elaborated information of the potentials of students.

Conclusion

In Finland, these developments in evaluation culture and related techniques of assessments are believed to provide added-value information to school subject related grade points of the credentials, above all, for the making of transitions-related decisions in regard the pathways of schooling. The utility expectations of such extended assessment, however, might well go beyond the education system internal perspectives. In the final part we consider Luhmannian working model suggesting that general-domain related competences like those referred to as 'Learning to Learn' are expressions of the substituting the historically preceding notion of general education (e.g. Bildung in German see, Luhmann and Schorr, 1988) by novel "contingency formula" which emphasizes capability of knowing instead of pre-structured

knowledge contents. In Luhmann's view, contingency formulas evolve within the codes of the function systems to specify their interdependency demarcations. As more or less empty forms, they are not part of the function systems, but instead facilitate second order observing of reference problems of the system in sufficiently abstract way to support the clarification of prerequisites for communicating decisions on education. Contingency formulas facilitate reflection of reflection as they attempt to control the relation of system's function, performance, and reflection.

References

- Archer, M. 1979. *The Social Origins of State Educational Systems*. London: Sage Publications, 234 pp.
- Archer, M. 2012. *The Reflexive Imperative in Late Modernity*. Cambridge: Cambridge University Press, 340 pp.
- Boli, J. 1989. *New Citizens for a New Society: The Institutional Origins of Mass Schooling in Sweden*. Oxford: Pergamon Press, 296 pp.
- Kade, J. 2006. *Lebenslauf – Netzwerk – Selbstpädagogisierung: Medienentwicklung und Strukturbildung im Erziehungssystem*. In. *Yvonne Ehrenspeck and Dieter Lenzen (Eds.) Beobachtungen des Erziehungssystems*. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 21-32.
- Luhmann, N. 2002. *Das Erziehungssystem der Gesellschaft*. Frankfurt am Main: Suhrkamp, 232 pp.
- Luhmann, N. 2018. *Organization and Decision*. Cambridge: Cambridge University Press, 418 pp.
- Luhmann, N. & Schorr, K.E. 1988. *Reflexionsprobleme im Erziehungssystem*. Frankfurt am Main: Suhrkamp, 390 pp.