

Abstracts

Olaia Fontal Merillas, Sofía Marín-Cepeda, *Inclusive heritage: towards an index for the evaluation of educational inclusion to heritage*

Heritage education is consolidated in Spain through the Spanish Heritage Education Observatory (SHEO) and the National Education and Heritage Plan (NEHP). Other countries have stable index to evaluate and improve inclusive education. In our country, we do not have any instrument to measure and evaluate inclusive heritage education practices.

The present study is aimed at analyzing and evaluating heritage education programs of the SHEO to define quality standards that determine the success of the inclusion to heritage. We apply the sequential SHEO method in the framework of a mixed method, focused on the evaluation and statistical-descriptive analysis of programs, to detect the success standards that determine the minimum and maximum points towards the improvement, on which build an evaluation tool to measure the characteristics and needs for the development of inclusive education around heritage.

Keywords: cultural heritage; education; inclusion; evaluation; research.

Jordi Planella, Francisco Esteban Bara, *Aspects that would be worth recovering in today's higher education*

The article deals with the current state of higher education, where moral liberalism, pragmatism and utilitarianism could alternatively prevail. Nowadays higher education is generally valued and appreciated according to its level of utility, in a postmodern sense, i.e. with respect to efficiency and effectiveness. However, another higher education is possible, as the history of university and the philosophy of education shows us. Higher education

has also to do with a process of personal transformation in the deepest sense of the term. For this reason, the article proposes to recover three aspects, namely: the recognition of the student as a true subject of moral learning; the moral excellence of higher education; and finally, learning specific disciplines and their contents.

Keywords: higher education; ethics; philosophy of education; university teaching; higher education policy.

Wenjun Lin, Xuefu Xu, Francesco Dell’Anna, *The Impact of Economic Plans on the Chinese Education System: a Machine Learning Approach*

This paper investigates the effects of Chinese economic plans on the academic education system. To quantitatively illustrate the outcomes of investment plans on the Chinese contemporary society, the conducted study proposes a mathematical model for the employability of graduated students. The proposed technique consists in an averaging inter-model ensemble of several neural networks trained on a labeled dataset categorized as follows: age and gender, study program and academic achievements, willingness to work in the considered industry sectors and, public investments on the considered industry fields. The supervisory signal chosen for the analysis is the ratio between graduated and employed students. The attained models clearly jibe on the importance of investments in each working sector as the most impactful parameter affecting the student employability.

Keywords: planned economic growth; Chinese education system; employability analysis; supervised machine learning; inter-model ensemble.

Oren Pizmony-Levy, Judith Torney-Purta, *How Journalists and Researchers Communicate Results of International Large-Scale Assessments*

Organizations conducting international large-scale assessments (ILSAs), such as PISA and TIMSS, rely on the media to disseminate the results. Examination of the nature of media coverage of ILSAs is limited, however. The paper presents a multi-country analysis of media coverage of OECD-PISA 2012. Using a standardized protocol and samples of news articles from 20 countries, we show how newspapers reduce the complexity of ILSAs into a simple story of international competition. The paper also documents that the findings in subject areas such as the IEA’s civic education studies rarely

receive attention from journalists. These studies rely on the initial reports and also on secondary analysis of their data disseminated through channels such as scholarly journal articles. We consider the balance between these approaches as ways to engage the public, educators and education policy makers using the concept of communities of practice.

Keywords: international assessments; education journalists; mathematics education; science education; civic education; IEA; OECD.

Wolfram Schulz, John Ainley, *Lower secondary school students' attitudes toward equality*

The IEA International Civic and Citizenship Education Study (ICCS) investigated outcomes and processes of civic and citizenship education in 2016 (Schulz et al, 2017) and 2009 (Schulz et al., 2010). In addition to investigating students' knowledge and understanding of civics and citizenship those studies also studied attitudes regarding the importance of various principles underlying societies and communities, attitudes that students hold toward civic institutions and society, and perceptions of civic groups, institutions, and sources of information. This article discusses ICCS results regarding students' attitudes to gender equality and equal rights for ethnic and racial groups. It describes the strength of these attitudes in 2016, changes since 2009, and associations with student characteristics, social interactions at home and factors related to civic learning at school. Results suggest generally strong endorsement of equal opportunities for males and females, as well as ethnic and racial groups, but with considerable variation across countries. Factors associated with civic learning, in particular civic knowledge, were positively associated with endorsement of equal opportunities. Furthermore, the findings suggest associations of these attitudes with school climate factors as well as background and engagement.

Keywords: IEA ICCS; civic learning; students' attitudes; equality; school climate.

Valeria Damiani, Elisa Caponera, *Investigating expected civic engagement of immigrant and non-immigrant young adolescents in Europe: findings from ICCS 2016*

This paper aims at expanding some findings of the International Civic and Citizenship Education Study (ICCS 2016), analysing the associations

between European immigrant and non-immigrant students' civic knowledge, perceptions of good citizenship, and expected civic engagement (students' expected participation in legal/illegal activities and in electoral/political participation) using structural equation modelling. Descriptive analyses are also presented to investigate the extent to which immigrant students' perceptions of different aspects of citizenship and their expected civic engagement differ from their native-born counterparts.

Results show that immigrant adolescents who took part in the survey seem to prefer a type of engagement that does not trust the traditional methods related to electoral participation, but is willing to be committed to other forms of participation, either in political or legal activities, or even in illegal protests.

The structural equation model highlighted no difference in the relation between immigrant and non-immigrant students' perceptions of citizenship and their civic engagement, stressing the relevance that formal education plays in fostering students' civic engagement during adulthood.

Keywords: ICCS 2016; immigrant students; civic engagement; citizenship perceptions; Europe.