



EVIDENCE BASED PRACTICE IN ACADEMIC DROPOUT POLICY. THE PRO-INTEGRA MODEL

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Abstract: *Evidence Based Practice (EPB) entails making decisions relying on the combination between the best available evidence and the best practical expertise. A method used in medicine starting with the 90's, it has been extended nowadays to other fields such as education. The current paper looks at the use of EPB in student dropout mitigation, as an example of method diversification within educational policy implementation strategies. To that end, the model was applied to a "1 Decembrie 1918" University of Alba Iulia (Romania) project. The results support the applicability of EPB model to other institutions, providing higher education and being confronted with the problem of academic dropout.*

Keywords: *evidence-based practice; academic dropout; policy and practice.*

Introductory Notes

Some of the classical educational policy design, implementation or evaluation methods have been questioned as to their effectiveness with newer, more effective methods being explored. Some of these newer methods have resulted from combinations of the same classical methods, but some have been new or imported from other areas where they proved their merit.

In educational policy design, the definition of scientifically-based research is considered as essential by Eisenhart and Towne (2003). Case study has traditionally been the classical research method in education. The limitations of the method however led to the emergence of new forms of qualitative research, the multi-site qualitative research being one of them. In principle, the method while employing same data collection and analysis procedures, asks the questions however in more settings than one (Eisenhart and Towne, 2003). Although expensive, the method has been promoted for public policy evaluation on the merit of overcoming both some weaknesses of the quantitative method for ample projects and the peculiarities of one particular case study (Herriott,

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Firestone, 1983, p.14). Johnson and Onwegbuzie (2004) propose a combined methodology, appreciating that the mixed method research is complementary to traditional quantitative and qualitative method one, its merit being that of bringing more pragmatism in research endeavours.

In the case of special education however (Odom et al., 2005, p.137) claims that "the devil is in the details" and for that reason, they propose a staged approach in order to counteract the effects of defective methodologies. The first stage should be one of transition from descriptive research to experimental causal research, the second one being one of examination of the process that can affect the large-scale adoption of some practices. As to surveys, the most critical aspects for educational policy evaluation are their validity and their reliability (Desimone and LeFloch, 2004).

Evidence Based Practice (EBP) originated in the 1990's, in medical practice and it has gradually been gaining ground in psychology and education (Thomson, Diamond, McWilliam, Snyder, and Snyder, 2005). One believes the publication of an EBP methods debate by National Implementation Research Network (NIRN) in the prestigious *Implementation Science* Magazine was the event that most likely disseminated the concept into other areas (Bertram, 2014, p. 2).

In debating the implementation of effective services, Bertram (2014) describes the spread of EBP in several domains like agri-business, business in general, hospital administration, medical and nursing services, education and others, although prior to 2005, there was not much of a consensus as to the role of organizational infrastructure in client outcome and fidelity. Relying on Bronfenbrenner's ecological systems theory and appreciating that the NIRN model had poor relevance for the academic environment, Rosalyn Bertram proposed a new model using organizational and academic curricula changes as determinant mechanisms for student dropout effect-mitigation educational policy design.

The quality of the evidence used to support the practice relies heavily on the integrity of the data to be used in a particular study (Thomson, Diamond, McWilliam, Snyder, and Snyder, 2005, p. 184). Evidence appears easier to come by, in this new age of accountability and so more and more practice relies on evidence. Medicine and education are two of the areas in which this is true, although there is a difference in that, in medicine, EBP may lead to breakthroughs, while in education, only to incremental improvements.

In connection to intervention management, Webb (2001) claims that EBP emerges as a behaviour optimizing instrument in systematically organized environments, the model being heuristic, limited rationality based, with indeterminate, reflexive and locally optimal at best decision-making process. Webb considers EBP as a rigid framework, which restricts social assistance and leads it to a narrow path. The final result is the adoption of managerial strategies, which cultivate performance through regulation and individual practitioners' control.

For the identification of primary academic success factors, Johnson et al. (2016) used a model adapted from medicine employing the succession: Diagnosis → Prescription → Intervention → Evaluation. The model has been applied to 512 students, divided in

three distinct profile groups: (1) traditional, (2) language/education/financially-challenged and (3) older/family-supporting/financially-challenged. The results led to practical applications that made a more targeted academic success intervention possible. One application was the development of an online early alert diagnostic instrument, which may be used for new student orientation by academic administration staff (Johnson et al., 2016, p. 320).

Evidence Based Practice and European Union Educational Policy

Taking notice of the spread of EBP in European Union policy making, an Eurydice (EU official education information network) report defines an evidence-based policy as one that "helps people make well informed decisions about policies, programmes and projects by putting the best available evidence at the heart of policy development and implementation" (Davies, 1999, European Commission/EACEA/Eurydice, 2017, p. 6). In the field of education, evidence-based policies rely on existing reference criteria like academic dropout, the degree of tertiary level graduation, educational mobility etc., and on existing key indicators like tertiary education attainment, 30-34 age group, and indicators from various sources like studies, opinion surveys, secondary analysis and others.

Distinct mechanisms and institutions are also created for evidence-based result distribution and policymaking. *Monitorul educației și formării* [Education and Training Monitor] is a Romanian annual publication that surveys the evolutions in the field at European Union level and which records developments in themes and criteria and progress in the achievement of main objectives¹.

In analyzing the European challenges deriving from the increased socio-occupational and educational mobility of our times, Van Driel, Darmony, and Kerzil (2016) conclude that national-level educational policies have not led to a visible decrease in attitudes of intolerance, discrimination and racism in schools. Since education plays a key role in developing common fundamental values in society and in view of the recent terrorist attacks not just on European citizens, but also on shared values of liberty, democracy, equality, rule of law, human rights and dignity, on March 15th, 2015, under the initiative of France and the Latvian Presidency of the Council of the European Union, the ministers of education from EU countries adopted a common "Declaration on promoting citizenship and the common values of freedom, tolerance and non-discrimination through education". Several countries embarked on educational policies to support the declaration objectives, Romania being in the "policies under discussion" stage in 2016, which is an intermediate-level status in the process (European Commission/ EACEA/Eurydice, 2016a, pp. 3-4).

The Council of the European Union established that, by 2020, at least 40% of the 30-to-34 age group of citizens attains tertiary graduation or equivalent certification. In line with this objective, through the "Supporting growth and jobs: An agenda for the

¹ See ec.europa.edu/education/policy/strategic-framework/et-monitor

modernization of Europe's highest education system" communication the European Commission stated two major inter-linked policy goals: the increase and the widening of participation in higher education and the improvement of the quality and of the relevance of it. A series of education and training monitoring structural indicators have been developed aiming at: (a) targets for widening participation of under-represented groups; (b) monitoring of the characteristics of the student body; (c) recognition of informal and non-formal learning; (d) requirements to monitor completion rates in Quality Assurance; (e) performance-based funding with a social dimension (European Commission/EACEA/Eurydice, 2016b, p. 61). The 2016 European Commission's Eurydice rapport states that although Romania is one of the few countries that established under-represented group participation enlargement targets, it hasn't developed a student characteristic monitoring system yet. As such, one does not have data on the level of achievement of these targets.

The special attention that tertiary education enjoys in European policy making is due to its merit in ensuring not just employment, but a high-level income one, too. To that, one could add the value of social inclusion, another one of the main objectives of European social policy. In looking at the unemployment rates, in relation to the level of education, the *Education and Training Monitor's* analysis shows that persons with higher qualifications receive an 'employment premium' compared to their peers with lower qualification level, since the unemployment rate of tertiary graduates is lower. (European Commission/DGEC, 2016, p. 72).

The PRO-INTEGRA project – a model of Evidence Based Practice

The PRO-INTEGRA project relies on the premise that good knowledge of the risk-at-exclusion vulnerable groups' needs is necessary for effective intervention design. The broad spectrum of "1 Decembrie 1918" University students' background should provide various clues on the array of exclusion factors. This way, one can find a broad applicability of the results of the research and a suitable model of good practice.

Our hypothesis is that a substantial proportion of the students at risk of educational exclusion come from disadvantaged environments. A good understanding of the particular aspects of these environments is thus necessary in order to arrive at effective inclusion solutions. We also presumed that the educational staff dealing with these issues is largely unaware of these aspects (Marina, Buțiu, 2016, p. 15-16).

The intervention project had the goals of increasing institution's inclusion capacity for the students at risk of exclusion and of promoting equity in education. Its objectives have been (1) the development of an integrated information counselling platform to encourage student access and participation, (2) the undertaking of institutional-level qualitative and quantitative studies to identify the at-risk-of-exclusion situations, the under-represented student groups in the University and the attitudes towards the issue of academic equity, (3) the development of individual social equity competencies for teaching and auxiliary staff and for students alike through specialized training, (4) the development of risk assessment and management skills for student-advising career

counsellors and the increase in the number of students benefiting from these services and (5) the enhancement of the equity strategy and intervention and reporting instruments institutional development capacity (Marina, 2016, p. 8).

In a relatively short time interval, a series of high-intensity, institutional interconnected activities have been performed which involved diverse stakeholders (Table 1).

Table 1: Stakeholders and activities in the PRO-INTEGRA project

Stakeholders	Activities
Students	Survey response Group interview participation Training Counselling session participation <i>INTEGRA platform interaction</i>
Teachers	Research on the issue of equity in education Survey response Group interview participation Curricula modification proposals <i>INTEGRA platform interaction</i>
Career counsellors	Training At-risk students' socio-occupational counselling and orientation Student training on INTEGRA platform use <i>INTEGRA platform interaction</i>
Administrative staff	Training <i>INTEGRA platform interaction</i>
Managers	Access and Social Equity Strategy for 2016-2020 of the "1 Decembrie 1918" University of Alba Iulia Access and Social Equity Strategy Implementation Plan for 2017

Three features of the six-month project qualify it as Evidence-Based Practice.

Firstly, the *practitioners' expertise*, which was employed by a large number of teaching staff and administrative personnel towards a focused, and pragmatic result in a relatively short period of time. The issues of social inclusion, equity in education and academic dropout have been recurring themes in scientific studies and publications, some being approached from the equity-equality perspective (Abbott, 2014), others examined in relation to the sources of inequality, like income (Oppedisano and Turati, 2011) or ethnicity and race (Sólorzano, Villalpando, and Oseguera, 2005). The social inclusion and vulnerability published studies of the University's social science academia (Buțiu,

2011, Marina, 2013, *coord.*, Buțiu, 2013, Millea, 2013, Stănea, 2013, Pascaru, 2013, Buțiu, 2014a, Buțiu, 2014b) have constituted the platform on which the theory in the field has been linked to teachers' practical experience and to the PRO-INTEGRA project research findings. Keystone for project's sustainability was the involvement of management in the design and implementation of the inclusion and equity institutional strategy. The administrative personnel also found itself having to deal less with bureaucratic tasks - that were not too enthusiastic about to begin with - and move into the new posture as a supplier of equity expertise.

The second notable feature was the set of *students' values and expectations* in their roles as customers of the educational services offered by the University. These were revealed through a survey of 1038 subjects and a group interview of 8 students selected through the Student's League¹. For a comparative look, a series of questions have been asked from all of the students, teachers and administrative personnel alike. The results revealed significant differences in their representation of the same issues and have been shared back through the restitution methodology (see Pascaru, Buțiu, 2007). Student's perspective was more concerned with the educational process. They expect better prepared teachers, both in theory and at practice, more openness to student's problems and more modern and applicable subjects to real-life professional job requirements. Dissatisfaction with some teachers and with some practical activities has been voiced, together with a general desire and availability for volunteer opportunities.

And finally, the third feature was the stock of *best evidence* revealed in the academic and administrative documents and supplied through the counselling, communication and social inclusion informatics platform INTEGRA. The platform allowed interconnections that lead to timely identification and management of some academic dropout problems. According to Marina (2016, p.12), the INTEGRA platform was inspired by the *Student Alert* system found in many U.S. and U.K. Universities which has several major advantages for intervention actions: activity organization for at-risk students, participation fostering and risk category tailored interventions. Breaz and Despa (2016) describe it architecturally as having a modern design that allows for fast data access and a friendly user interface. The system allows differentiated access to four user classes: *Student, Counsellor, Tutor* and *Secretary*. The database allows tens of thousands of student records. Additionally, the platform includes two interactive modules, the *Communication Module* and the *Counselling Module*. The messaging system allows for hyperlinks and attachments and for user e-mail notifications (Breaz, Despa, 2016, p. 45-46).

In the PRO-INTEGRA project, we configured the causal chain diagnosis - intervention - results - objective - impact presented in Figure 1. for applied modelling of change theory (White, 2009).

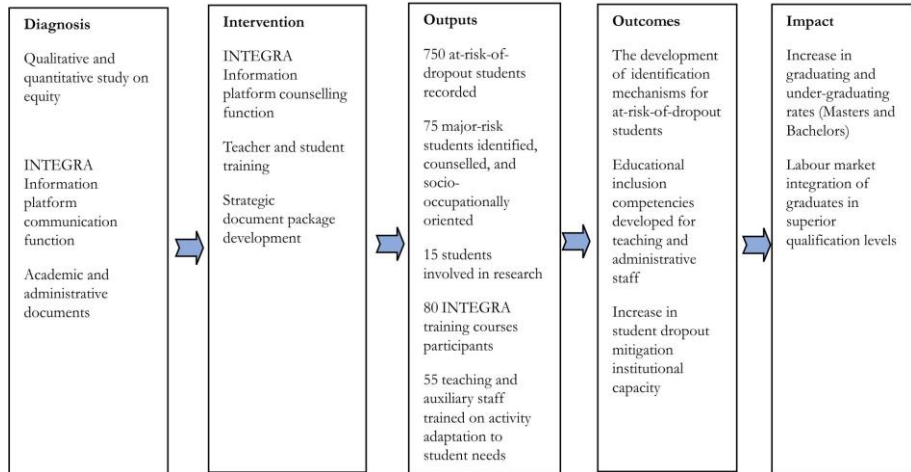
The diagnosis achieved based on three major information sources allowed the issuing of descriptive hypothesis i.e. the rationale of the intervention, or simply said the problem causes (*see* Chen, 2005). The intervention took into account both institutional capacity and resources and external financing², necessary for the expected results. If the

¹ Organization of students.

² External financing through the CNFIS-FDI 2016-0055 grant.

immediate results (outputs) have been recorded during activities, the outcomes have been evaluated at the end of the project. The impact will be assessed over a longtime frame, long after the end of the project's implementation.

Figure 1: Causal chain of intervention in PRO-INTEGRA project



Conclusions

It is a well-known fact nowadays that high-quality upper education services require not just quality teaching but also innovative methods for student retention and more complex approach overall. The landscape of educational retention practices is now rich in shades, many universities striving to support the various needs of their students, throughout their schooling journey. It is also known that innovation in education management is less prevalent than in business. The organisational context, the individual student characteristics and the external environment are the three factors that influence academic success. In education, as in the medical field, although there already is a vast amount of information stored and repeatedly updated, policy design takes only a limited account of it. That is why this evidence needs to be correlated with practitioners' experience and with clients' values and expectations.

Universities are organisations that, from the perspective of social constructivism, continuously explore avenues of progress and cooperation for their members in not only dealing with, but also *driving* the process of change. As complex systems, universities are aware that any change in one area triggers effects in other, if not all, areas and that is why changes, done through projects or otherwise, must be carefully analysed before being implemented. One may want to recall White's (2009) remark that

policy relevant research better be based on a change philosophy that describes the entire causal chain.

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