ISSN 2340-8170 (Print)
ISSN 2386-3137 (Online)

Tuning Journal for Higher Education

Growing Tuning seeds

Volume 3, Issue No. 1, November 2015

Tuning Journal for Higher Education

Growing Tuning seeds

Tuning Journal for Higher Education

Growing Tuning seeds

Volume 3, Issue No. 1, November 2015

University of Deusto
Bilbao
2015

Tuning Journal for Higher Education (TJHE), Tuning Journal in short, is an international peer-reviewed journal publishing in English original research studies and reviews in all aspects of competence-based, student-centred, and outcome-oriented education reforms at university level across the globe. It is a joint initiative of the University of Deusto (Spain) and the University of Groningen (The Netherlands) that is run by the Tuning International Academy (http://tuningacademy.org/): an international meeting point for fostering innovative teaching, learning, and research in higher education.

The main goal of the Journal is to promote quality research into the 'Tuning Methodology' for designing, implementing, and assessing context-sensitive degree programmes and to subject the tools developed during Tuning projects and other educational projects to full academic scrutiny and debate among students, teachers, policy makers, administrators, and academics across societies, cultures, professions, and academic disciplines. To this end, the Journal invites applications for thematic issues, conference proceedings or monographs from all stakeholders. Guidelines for the preparation and submission of manuscripts are appended to this Issue and available at the web of the Journal: http://www.tuningjournal.org/

Publication Frequency and Format
Tuning Journal is published electronically and in print version twice a year. Its first issue appeared in November 2013.

Subscriptions
Currently, no charges for submission, publication, online access, and download are applicable. Few print copies are freely made available for key collaborators and partners.

P.O. box 1 - 48080 Bilbao, Spain
Publications Service
Phone: +34-944139162
E-mail: publicaciones@deusto.es
URL: www.deusto-publicaciones.es

ISSN: 2340-8170 (Print) 2386-3137 (Online)
Legal Deposit: BI-1482-2013

Printed and bound in Spain

Tuning Journal for Higher Education, Volume 3, Issue 2 (November 2015)
Growing Tuning seeds

Tuning Journal for Higher Education (TJHE)

Growing Tuning seeds

Volume 3, Issue No. 1, November 2015

Contents

Editorial

Luigi F. Donà dalle Rose and Anna Serbati 13

Articles

Implementation of Competence-Based Approach: Stories of Practices and the Tuning contribution to academic innovation
Anna Serbati 19

Impact of Erasmus mobility for study on the development of Tuning Europe generic competences, as assessed by outgoing and incoming students in a large university: a revealing analysis
Luigi F. Donà dalle Rose 57

Changing paradigms: towards competency-assessment in admission to master's programmes in Europe: a review
Kees Kouwenaar 99

A 21st Century Imperative: Integrating Intercultural Competence in Tuning
Darla K. Deardorff 137

Competencies, Learning Outcomes and Forms of Assessment: the Use of Tuning Methodology in Russia
Artur Demchuk, Yevgeniya Karavaeva, Yelena Kovtun, and Svetlana Rodionova 149

Tuning impact in Latin America: Is there implementation beyond design?
Pablo Beneitone and Maria Yarosh 187

Guidelines for Authors 219

TJHE Ethical Guidelines for Publication 225

Editorial

Editorial

Luigi F. Donà dalle Rose
Editor

Anna Serbati
Assistant Editor

Welcome to Volume 3, Issue No 1 of the Tuning Journal for Higher Education. This volume is the first one issued by a new Editorial Team, right after two remarkable years, during which the first four issues of the Journal were edited. It was a long held ambition of the Tuning Academy that the worldwide Tuning community should have a 'voice' in the form of an academic publication. Two years preparatory work went into establishing this 'voice' to the highest possible standards before the first issue was published in November 2013.

The support of the Universities of Deusto and Groningen was crucial in establishing funding and an editorial office. The wisdom of Julia Gonzalez, Robert Wagenaar, and Pablo Beneitone was key to establishing the Journal's aims, Managing, Editorial and Advisory Editorial Boards. The Managing Editor, Ladislas Bizimana Kayinamura, ensured the highest possible ethical and production standards and co-authored the web page and the extensive supporting documentation. Nothing would have been published without the hard work of the Editorial Board and Board of Advisory Editors. To all of them go heartfelt thanks.

We can rightly say that the Journal "was created" in these four years. The Founding Editor Prof. Paul D. Ryan played a great role, cooperating with the Editorial Board for the Journal policies, preparing the TJHE Ethical Guidelines for Publication, the guidelines for authors, setting up standards and procedures for the review process. Under his wise guidance, the TJHE achieved high editorial performances, proposing itself as a natural host to good research findings on student centred, competence and learning outcomes based reforms of higher education programmes. The by now large Tuning Community as well as many others have a precious and well working communication tool, with its own specificity in the wide landscape of educational journals. As new editors, we gratefully rely on the great experience of these founding years and, on behalf of the Editorial Board, we

confirm the continuity of the journal policies, regarding in particular open access (no individual charges for submission and access) and a continuing effort in order to qualify for ISI registration.

Moreover, we confirm that the greatest credit must go to our contributors and readers in whose hands lies the future of the Journal. Please continue to contribute, circulate, cite, comment and debate. We invite, again on behalf of the Editorial Board, submissions from "*all those working to improve the quality, transparency, transferability and relevance of higher education programmes and who wish to share their experience with the global community via the pages of this journal.*"[1]

The present issue did not ask in advance for focused contributions. Nevertheless, a possible *ex post* focus might very well be "ordinary life of the Tuning Community" or even better "growing Tuning seeds".

There has long been a debate as to what effect the 'Bologna style' reforms have had upon global higher education. The first two articles underwent the review process under Paul D. Ryan, as Guest Editor, in the respect of the TJHE Ethical Guidelines for Publication, and, according to him, they provide exciting new insights.

Anna Serbati reports on the results of in depth interviews with experienced academics as to the effect of the various Tuning projects around the world on innovation in teaching and learning within their system. After analysing case-studies, she concludes that such projects have not only promoted a wider understanding of the concept and practice of competence-based higher education, but that they have promoted wider communication in this field. Suggestions and rooms for improvement of the Tuning methodology are also provided in the discussion.

The article by Luigi F. Donà dalle Rose discusses the impressive database on some 1500 Erasmus exchanges to and from the University of Padova. This analysis shows clearly how students have developed as a result of these exchanges and gives insights into how such development is affected by a student's 'culture'. The principle measure used in this article is which five of the thirty *Tuning EU* generic competences did the students attach importance to at the end of their visit. This allows rich analysis of how and perhaps why the students have developed those competences over their stay.

The contribution by Kees Kouwenaar touches upon the delicate step of assessing generic competences of students willing to enroll in master's programmes. His article describes in depth the rationale of the dedicated Mastermind Europe project and it offers much more theoretical and

[1] Ryan, Paul R., "Editorial," *Tuning Journal for Higher Education* 1, no. 1 (2013): 13.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 13-15
http://www.tuningjournal.org/

background information than the available documents on the project website. It also reports the first outcomes of the project (not published earlier), which may represent useful tools for academic, especially directors of master's programmes, to switch from an admission decision based on recognition of a diploma to a proper assessment of the applicants´ competences.

The contribution by Darla Deardorff opens to a new relevant aspect for the Tuning Academy: the intercultural competence. With the growing diversity in the world today, beyond national diversity, intercultural competence cuts across disciplines, subjects, and contexts. The Author proposes a research-based definition and interpretative framework of intercultural competence, clarifying the terminology, and she opens a reflection on possible ways to embed intercultural competence into Tuning Frameworks around the world.

The last two articles have a geographical flavor. In a way, they link up with the first contribution by Serbati, closing the circle of the "growing Tuning seeds".

The contribution by Artur Demchuk, Yevgeniya Karavaeva, Yelena Kovtun, and Svetlana Rodionova focuses on the use of Tuning methodology in Russian context, with particular reference to the topic of assessment. Authors deepen the correlation of competencies, learning outcomes and the methods of their assessment, by proposing an algorithm developed by the experts of Association of Classical Universities of Russia. Two undergraduate programmes in Philology and Psychology are discussed as examples of this implementation.

The contribution by Pablo Beneitone and Maria Yarosh offers the first results of a large scale study promoted by DITA-Deusto International Tuning Academy about the impact on higher education of Tuning projects in different world's regions. The article describes the methodological tool used in the study and reports the findings of a two-phase detailed survey, covering both institutions, which participated earlier on in Tuning LA, and individuals from those same institutions (academic executives, teachers and students). The survey obtained a high level of response, a first strong indication of long-term Tuning impact, and the collected data allow detailed assessment of such an impact in three different domains.

Finally, we gratefully acknowledge Paul D. Ryan's wishes for every success as new editors. We shall truly try our best!

Articles

Implementation of Competence-Based Approach: Stories of Practices and the Tuning contribution to academic innovation*

Anna Serbati**

doi: 10.18543/tjhe-3(1)-2015pp19-56

Abstract: The rationale of the present paper is to investigate and stimulate a reflection on *the Tuning contribution to academic innovation* through the collection of case studies among some Tuning projects, focussing on methods and tools to implement successful and *innovative approaches to learning, teaching*, and assessment appropriate for *competence-based approach (CBA)*. In order to deepen these concepts, a conceptual framework on competence-based approach and student-centred learning will be presented, particularly focussing *teacher conceptions of teaching* as well as *pedagogical content knowledge* and their influence on teaching practices. The Tuning contribution in supporting academic innovation will then be deepened, through a *macro-level overview of the methodology*, and a synoptic table of cross-cutting themes identified across the Tuning projects will be the starting point of the empirical part of this study. Moreover, the *multiple case studies* conducted through semi-structured interviews with teachers from Higher Education Institutes involved in previous completed Tuning projects will be presented. Research design, sampling and data analysis will be described, and major findings will be presented. Results show a general understanding, but with different perspectives on the competence based approach as well as appropriate teaching and learning methods applied worldwide within the CBA framework. Outlines on the Tuning contribution to academic innovation in this framework will be offered, by identifying main strengths, weaknesses, threats and opportunities of the methodology. Suggestions and guidelines for future projects, training and researches of the Tuning Academy are provided for possible implementation, highlighting the relationship *between teaching, learning and research*.

Keywords: Competence-based learning; teaching and learning activities; Tuning contribution; research; training; academic community; practice sharing.

* This work was carried out at Deusto International Tuning Academy (DITA) at the University of Deusto, Bilbao, Spain, ans was financially supported by DITA Short-Term Visit Scholarship (http://tuningacademy.org/short-term-visits-call/). The Author would like to thank participants for their time and availability, deep and precious reflections.

** Dr. Anna Serbati (anna.serbati@gmail.com) is currently research associate at the Department of Philosophy, Sociology, Education and Applied Psychology at the University of Padova (Italy). Her research focuses on Adult Learning and Higher Education.

I. Conceptual framework of competence-based approach and student-centred learning

Historically, the University has always been a place for high level research that can contribute to the development of scientific progress and human well-being. However, with the expansion and massification of the higher education sector, the importance of research is combined with a larger focus on teaching and students' demands for quality teaching. Therefore, Universities have been called to reconsider their priorities and the services offered to the students. Teaching practice itself is changing, faced with international communities of students, young and mature, connected with all sources of online information and materials and with increasing level of competition among institutions. New pedagogical methods are emerging in order to reply to new challenges for higher education. New reflections are coming up from faculty towards a more integrated professional identity, through the *reconceptualization of the relationship between teaching, learning and research.*[1]

In this connection, Gibbs[2] stated that "the notion that teaching excellence flows directly from research excellence is absurd: they are in direct conflict, compete for academics attention and only one of them is rewarded". In literature this is a controversial issue. However it can be noticed that there is a general growing attention to the teaching practice and towards adopting methodologies that enhance a learner-centred approach. Moreover, as Etzkowitz & Viale[3] suggest, there are many emergent polyvalent research fields with theoretical, technological and commercial potential at the same time. The consequential process that goes from theory to practice — which used to predominate in the past — is now becoming a more integrated process, in which there is a mutual reinforcement between the two and a more evident interdisciplinarity, as Delanty[4] and Gibbons et al.[5] highlight.

---

[1] Marianne Bauer and Mary Henkel, M, "Responses of Academe to Quality Reforms in Higher Education: A Comparative Study of England and Sweden", *Tertiary Education and Management*, 3 (3) (1997): 211-228. DOI: 10.1007/BF02679385.

[2] Graham Gibbs, "The Relationship between Quality in Research and Quality in Teaching", *Quality in Higher Education*, 1(2)(1995): 147-157. DOI: 10.1080/1353832950010205.

[3] Henry Etzkowitz and Riccardo Viale, "Polyvalent knowledge and the entrepreneurial university: A third academic revolution?" *Critical Sociology* 36(4) (2010): 595-609. DOI: 10.1177/0896920510365921.

[4] Gerard Delanty, "The university and modernity: A history of the present" In *The Virtual University? Knowledge, markets and management*, ed. Robins K, Webster F (Oxford: Oxford University Press 2002), 31-48.

[5] Michael Gibbons, *et al.*. *The New Production of Knowledge. (*London: Sage Publications, 1994).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

With the Bologna Process in Europe since 1999 Universities have been asked to rethink the entire educational system. New aspects became more and more relevant, such as mobility, social dimension of higher education, employability, synergies among research, education innovation and *student-centred learning*.[6] Regarding the last point, according to a constructivist approach, teacher methods should emphasize the active role of students in the learning processes, encouraging appropriate learning activities to foster a *deep approach* to learning, instead of a *surface* approach to it[7]. Bligh[8] widely discussed that lectures are less effective than many other teaching methods for achieving almost every educational goal. His studies demonstrated that they can be effective in transmitting information, however, they are ineffective in promoting independent thought because students are not actively engaged and don't stimulate student enthusiasm in a subject. Following this line, Gibbs[9] argues that studies of the quality of student attention during lectures, of the accuracy and comprehensiveness of his/her notes taken during lectures, reach to the conclusion that lectures may be cheap ways of teaching, but not effective ones.

Entwistle[10] offered an interesting conceptual framework that includes both teacher's and leaner's roles in the teaching and learning process and considers as relevant variables the content as well as the learning environment. This framework suggests, therefore, that quality learning can be achieved when learners and teachers together deal with content in pedagogically suitable ways.[11] On the students' side, prior knowledge and abilities should be considered, as well as their attitude and behaviours in approaching studying and learning and perceiving the learning environment. On the teachers side, it is relevant to take into account the design of the intended learning outcomes and the consistency with the teaching materials, methods as well as the features of the created learning environment, all

---

[6] Henry Etzkowitz, Marina Ranga, and James Dzisah "Whither the university? The Novum Trivium and the transition from industrial to knowledge society", *Social Science Information* 51(2) (2012): 143-164. DOI: 10.1177/0539018412437099.

[7] John Biggs and Catherine Tang, *Teaching for Quality Learning*, (New York, McGraw-Hill, 2007).

[8] Donald Bligh, *What's the Use of Lectures?* (London: Jossey-Bass, 2000).

[9] Graham Gibbs, 53 Powerful Ideas All Teachers Should Know About, idea n. 20, Ocober 2014, available at: http://www.seda.ac.uk/53-powerful-ideas/

[10] Neol Entwistle, *Concepts and conceptual frameworks underpinning the ETL project*. Occasional Report 3, Enhancing teaching-learning environment (2003).

[11] Nick Zepke, "Threshold concepts and student engagement: Revisiting pedagogical content knowledge", *Active Learning in Higher Education* 14(2) (2013). DOI: 97-107, DOI: 10.1177/1469787413481127.

influenced by their conceptions and beliefs of teaching. Since the focus of the present paper is mainly on practices of teaching according to the competence-based approach, the teachers' part of the model particularly draws the attention: the two aspects related to content /subject knowledge on one hand, and teaching/pedagogical experience and ideas on the other hand, are interpreted in an integrated way, as proposed by Shulman[12] with the so-called concept *pedagogical content knowledge*. According to Entwistle[13] there are many variables to be considered (see figure 1) in interpreting a teaching practice, and these refer both to the discipline and to the pedagogical knowledge in an integrated way. Core elements affecting ways of thinking and practising in the subject (WTPs) are the *teacher conceptions of teaching*.[14] The literature on teaching in higher education developed specific research fields concerning teachers' conceptions of teaching in higher education. Teacher-centered approaches and student-centered ones might be considered as a continuum of teachers' orientations. Teacher-centered approaches interpret teaching as knowledge transmission from the experts (teachers) to students, whose knowledge is not considered as relevant for learning. Student-centered approaches consider transmission as one component of the whole process, but the major focus is on students' learning and therefore he/she has a key role in creating a learning environment. Each student develops individual habits in studying, and these can be congruent or dissonant[15] with the demands of the learning environment. Teachers who follow student-centered approaches need to consider the relation between learning styles, students' existing knowledge and facilitate students' reflection, critical elaboration, and knowledge application to different situations.

As mentioned, due to the complexity of the teaching phenomenon, many variables have to be considered, depending on the *context*, the *subject,* the *local regulations* and the *cultural conception* of higher education.

---

[12] Lee S. Shulman, "Knowledge and teaching: Foundations of the new reform". *Harvard Educational Review* 57(1) (1987): 1-22.

[13] Neol Entwistle, *Concepts and conceptual frameworks underpinning the ETL project*. Occasional Report 3, Enhancing teaching-learning environment (2003).

[14] See: Lyn Gow and David Kember, "Conceptions of teaching and their relationship to student learning," *British Journal of Educational Psychology* 63(1993): 20-33; David Kember, "Teaching beliefs and their impact on students' approach to learning," in *Teaching and Learning in Higher Education*, ed. Barry Dart and Gillian Boulton-Lewis, 1-25 (Camberwell, Australia: Australian Council for Educational Research, 1998).

[15] Jan D. Vermunt and Nico Verloop, "Congruence and friction between learning and teaching". *Learning and Instruction*, 9, (1999): 257-280. DOI: http://dx.doi.org/10.1016/S0959-4752(98)00028-0.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Samuelowicz and Bain[16] highlighted that teachers from different disciplines have acquired different conceptions of teaching because they experienced different epistemological conceptions of teaching as well as diverse processes of socialisation. Their beliefs about teaching are indeed different and influenced by the nature of the subject they teach. Moreover, professors do not act as individual professionals but are embedded in an institutional context, which may be relevant or at least influential in teachers' conceptions and actions.[17] In this multilevel framework, each teacher finds strategies to design course materials and learning environments to allow students achieving the expected learning outcomes.

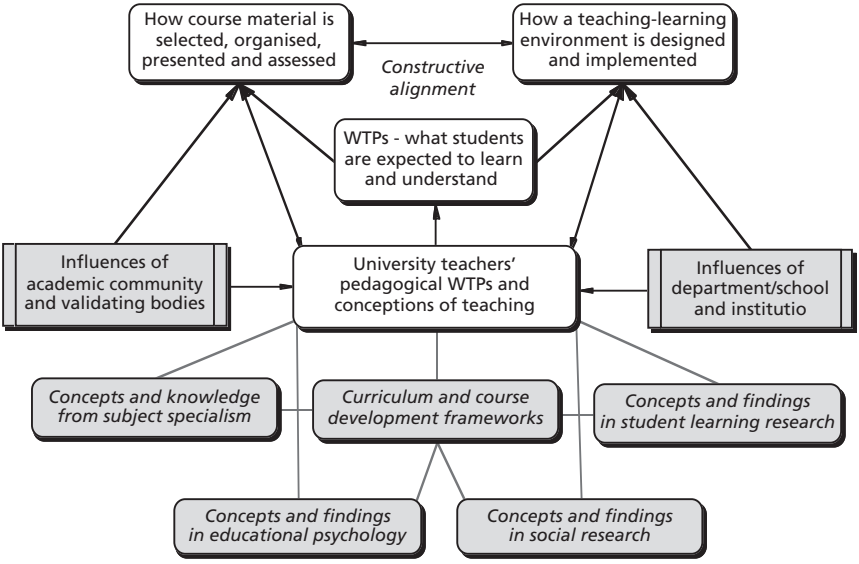

Figure 1

Influences on teaching and pedagogical ways of teaching and practicing in the subject

Source: Slightly adapted from Entwistle.[18]

---

[16] Katherine Samuelowicz and John D. Bain, "Conceptions of teaching held by academic teachers", *Higher Education,* 24, (1992): 93-111.

[17] Jenny J.Lee., "The shaping of the departmental culture: Measuring the relative influences of the institution and discipline", *Journal of Higher Education Policy and Management* 29 (1) (2007): 41-55, DOI: 10.1080/13600800601175771

[18] Entwistle, *Concepts and conceptual frameworks underpinning the ETL project*, 5.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Baeten, Struyven and Dochy[19] in their literature review state that student-centred teaching methods are related to three main components:

— An *active involvement of the students*: they are asked to construct knowledge by selecting, interpreting and applying information. Their assignments require reflections and constructions of their point of view on the subject.
— The role of teacher switching from transmitter to *facilitator,* who helps students out with problems they may face without telling the solutions.
— The learning and assessment activities which are "*authentic assignments*", such as practical and complex case studies.

Moreover, learning goals may be achieved in class through individual work and, therefore, individual reward, and also in a cooperative way, which according to Slavin[20] "refers to classroom techniques in which students work on learning activities in small groups and receive rewards or recognition based on their group's performance."

A deep approach to learning, supported by the above mentioned teaching strategies, as well as students' self-regulation and intrinsic motivation are framed in an active learning and constructivist approach, which aims at creating conditions for students to develop *competences*.[21] All teaching approaches that use competences as a starting point for determining the goals and contents of education could be called competence-based education. After the Bologna Process, this represents the major framework that universities have introduced with the aim of creating a European Higher Education Area (EHEA)[22] and to reinforce dialogue and a common language between education and labour market. The term "competence" has been largely debated and still can have very different meanings[23] depending on the author

[19] Marlies Baeten, Katrien Struyven, Filip Dochy, "Student-centred teaching methods: Can they optimise students' approaches to learning in professional higher education?", *Studies in Educational Evaluation* 39 (2013): 14-22. DOI: http://dx.doi.org/10.1016/j.stueduc.2012.11.001

[20] Robert E. Slavin, "Cooperative learning". *Review of Educational Research* 50(2) (1980): 315-342. DOI: 10.3102/00346543050002315

[21] Marcel Van der Klink, Jo Boon, Kathleen Schlusmans, "Designing and Implementing Views on Competencies". In *Competencies in Organizational E-Learning: Concepts and Tools*, ed. Miguel A. Sicilia (Idea Group, 2007).

[22] Europan Commission. *The Bologna Process – reforming universities in the next decade*, 22 April 2009. Available at: http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/615&format=HTML&aged=0&language=EN&=guiLanguage=fr

[23] Jean-Claude Coulet, "La notion de compétence: un modèle pour décrire, évaluer et développer les competences", *Le travail humain*, 74(1) (2011): 1-30. DOI: http://dx.doi.org/10.3917/th.741.0001.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

and discipline. However, the research of the last years illustrates some key elements of the concept itself, both from objectivist approaches and constructivist ones. Kiffe and Guy[24] in their review of international literature recently pointed out that a competence is, first of all, *situational*, namely referred to one or more situations where it is mastered in situ, as an aptitude to mobilise a set of appropriate resources in a relevant manner in order to deal successfully with problem situations.[25] Competences should be assessed and, therefore, *standard criteria* are required in order to evaluate whether a performance has been successful or not. In fact, since competence is not visible itself, it must be observed through measurable behaviours (learning outcomes).

Literature offers a wide range of definitions of the concept of competence. As von Glaserfeld[26] suggested, a key element in a constructivist approach to competence is the viability of the definition. As stated by Stoof et al.,[27] the definition is a collective activity, which involves different people trying to reach an inter-subjective agreement. Moreover, the definition selected should be appropriate for the goal, especially if it is a working definition, and take into account the context of its use (human resources management, construction of educational programmes, staff development design, recruitment or change management, etc.). These authors highlight difference forces composing a competence, both from an *inside approach* and from an *outside* one, that are relevant to having a broad picture of the phenomenon. As for the first aspect, five dimensions might be considered: the opposition between *personal versus task characteristics*, with a major focus on personal characteristics of the persons who do the job or achievement required. Another opposition is between *individual versus distributed competence,* which refers to interpreting the competence as something that belongs to a single person or to a group of people/ team in a shared perspective. A further dualism is between *specific versus general competence,* namely between a competence with a focus on a particular subject or discipline or another with a more open focus to transversal elements

---

[24] Kiffer Sacha and Tchibozo Guy, "Developing the Teaching Competences of Novice Faculty Members: A Review of International Literature", *Policy Futures in Education* 11(3) (2013): 277-289. DOI: 10.2304/pfie.2013.11.3.277.

[25] Guy Le Boterf, *De la compétence: essai sur un attracteur étrange*. (Paris: Editions d'Organisation, 1994).

[26] Ernst Von Glaserfeld, "A constructivist approach to teaching" In *Constructivism in education* (pp). Eds L. Steffe & J. Gale (Eds.) (Hillsdale, NJ: Lawrence Erlbaum, 1995), 369-384.

[27] Angela Stoof, Rob L. Martens, Jeroen J. G. van Merriënboer, Theo J. Bastiaens, "The Boundary Approach of Competence: A Constructivist Aid for Understanding and Using the Concept of Competence", *Human Resource Development Review* 1 (3) /2002): 345-365. DOI: 10.1177/1534484302013005.

which may be appropriate in different contexts. Another opponent pair is between *levels of competence versus competence as a level* or, in other words, between a wide concept of competence which includes different stages with different requirements (i.e. expert and novice) and a more precise one that represents a stage itself, in between other stages. The last element considered by Stoof et al.[28] are the opponent *teachable competence versus non teachable competence,* which actually compare a paradigm which states that elements such as skills and knowledge are visible and may be taught with appropriate educational programmes, and a paradigm that interprets the competence as unique combination, that may be not taught itself (only single skills or knowledge are teachable). As for the outside approach, there are a few other concepts such as performance, qualification, ability, knowledge-skills-attitude, expertise that relate to the competence and need a clarification. In this article, the interest is particularly focused on the relationship between *competence and qualification*. When a person is qualified, it means that there is a guarantee that at least minimal requirement for a job/degree/programme has been reached. It might be assumed that a qualified person is always competent, but it can happen that a qualified person does not seem to be competent, or a competent person is not qualified (for example if learning occurred in informal and non-formal contexts). It becomes, therefore, really important to find strategies and structures for educationalists to design qualifications by clearly describing competences that students should acquire to obtain the qualification and to align[29] them with the teaching, learning and assessment methods developed to create an appropriate learning environment. In this sense, a relevant contribute is offered by Tuning methodology, which will be discussed in the next paragraph.

II. **Tuning contribution in supporting academic innovation**

Tuning[30] Educational Structures in Europe Project is an initiative started in 2000 and is still playing a relevant role worldwide to support higher

---

[28] Angela Stoof, Rob L. Martens, Jeroen J. G. van Merriënboer, Theo J. Bastiaens, "The Boundary Approach of Competence: A Constructivist Aid for Understanding and Using the Concept of Competence", *Human Resource Development Review* 1 (3) /2002): 345-365. DOI: 10.1177/1534484302013005.

[29] See the concept of "constructive alignment" in: John Biggs, Catherine Tang Teaching for Quality Learning. (NY: McGraw-Hill, 2007).

[30] Julia González and Robert Wagenaar, *TUNING Educational Structures in Europe II. Universities' contribution to the Bologna Process*. Final report Project Phase II. Universidad de Deusto / Universiteit Groningen, 2005.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

education institutions in reforming curricula in order to respond to new evolving societies and to prepare workers and citizens of the knowledge society.

As Wagenaar explains,[31] the project was based on some key assumptions: the importance of the full involvement of academics as key players in this process; the development of internationally shared reference points at subject area level; the involvement in the curricula design of (potential) employers and professional organisations through appropriate consultation process; the importance of developing flexible degree programmes and international mobility; the need of *common language* and glossary among different stakeholders. Regarding the last point, the contribution of Tuning has been relevant in developing the above-discussed concept of competence. *Competences* in Tuning are dynamic combinations of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values and they are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of studies), while others are generic.[32] Students develop in their careers an integrated body of knowledge and skills from many different disciplines as well as transferable skills such as problem-solving, critical and creative thinking, communication and leadership skills. In order to determine a competence — which is a complex phenomenonStoof et al.[25] — and to assess it, Tuning suggests the use of *learning outcomes statements*, that can determine the level of competence. Indeed, learning outcomes are statements of what a learner is expected to know, understand and be able to demonstrate after completion of a learning experience. In order to deepen the key pillars of the methodology and to prepare the empirical part of this study, the researcher conducted a literature review and comparative analysis of Tuning reports and publications related to major Tuning projects. In order to understand better and represent the Tuning rationale and philosophy and have a *macro-level overview of the methodology*, the preliminary outcome of this analysis is a *synoptic table of cross-cutting themes* (Table 1) found across the Tuning projects.

---

[31] Robert Wagenaar, "Competences and learning outcomes: a panacea for understanding the (new) role of Higher Education?", *Tuning Journal of Higher Education*, 1(2) (2014): 279-302.

[32] Lokhoff, Jenneke, *et al.*. *A Guide to Formulating Degree Programme Profiles*. Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Table 1

Synoptic table of cross-cutting themes found across the Tuning projects

		Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Definitions	Competences	DYNAMIC COMBINATION OF COGNITIVE AND METACOGNITIVE SKILLS, KNOWLEDGE AND UNDERSTANDING, INTERPERSONAL, INTELLECTUAL AND PRACTICAL SKILLS, AND ETHICAL VALUES Fostering competences is the object of educational programmes. Competences will be formed in various course units and assessed at different stages			
			It is a construct that brings together the content of a subject and the outcomes into the world of real life.		As a rule, competences cannot be fully developed within one particular discipline.
	Learning outcomes	Learning outcomes are STATEMENTS OF WHAT THE TEACHERS INTENDS THE LEARNER KNOW, DO, UNDERSTAND AND BE ABLE TO DEMONSTRATE after the completion of learning. Detailed intended learning outcomes inform a single course unit or module			
			They may also be informed by the input of internal and external stakeholders, including — ideally — student representatives	Learning outcomes specify the requirements for award or credit	They are measurable and assessable competence "components"
		THE PARADIGM SHIFT IS FROM TEACHER DOMINATED CLASSROOM PRACTICES TO THAT OF PARTNERSHIP BETWEEN THE TEACHER AND THE LEARNERS AND THEIR PEERS			
	Student-centred approach and teaching and learning methods	substantial changes in approaches to Teaching Learning and Assessments (TLA) and staff development in this areas, for existing as well as new staff	This development does not occur automatically; it requires the transformation of African teachers, current and future	focus on the requirements of both the discipline and society in terms of preparation for employability and the exercise of citizenship.	Teaching and learning methods are the basis of co-operation between a teacher and students, cooperation, aimed at the achievement of learning outcomes.

		Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Definitions	Quality assurance	Tuning has drawn attention to the role of quality assurance in the process of designing and re-designing, developing and implementing study programmes.	Quality assurance agencies ensure the quality of programmes delivered by private and public	In order to meet new challenges, universities must have a flexible structure and organisation, [...] above all, incorporating systems of quality assurance	Quality of education as a means for providing a highly competitive, efficient organization of the educational process and of the University management
Results	Local Tuning centres		In a long-term perspective, the creation of regional Tuning centres in Africa linked to university associations and professional bodies could serve as catalysts to promote quality enhancement, harmonisation and regional integration	National Tuning Centres accompanied the project right from the outset, supported and opened up the reality of their national contexts to the needs or possibilities developed by Tuning, understood them, engaged in dialogue	Development of 13 Tuning Centres in Russia
	Implementation of consultation process	SURVEY WITH EMPLOYERS, GRADUATES AND ACADEMIC STAFF/FACULTY TO IDENTIFY THE MOST IMPORTANT GENERIC AND SUBJECT-SPECIFIC COMPETENCES			
		Aim to ascertain their views on the range of generic and subject-specific competences relevant for the area	The systems proposed were (1) an online survey and/or (2) an explanatory face-to-face meeting followed by administration of the survey	Tuning has consulted leading people, key local thinkers and experts from industry, both learned and civil society and working parties	

		Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Results	Meta-profile		Teacher Education SAG described four categories of teacher education competences: (1) knowledge and understanding, (2) practice and skills, (3) values and ethics and (4) interpersonal skills.	For Tuning methodology, meta-profiles represent the structures of the areas and combinations of competences (general and specific) that lend identity to the disciplinary area concerned.	A Meta-profile reflects the structure and the interrelation of competences that characterise a particular subject area. It is determined by: features of the professional activity; needs of society and the labour market ; and trends in Education
	Subject specific competences list	COMMON LIST OF SUBJECT-SPECIFIC COMPETENCES AMONG ALL SAG			
		Steps: research in the literature; consultation with national bodies; and discussion with other academics.	The process of defining competences within the context of teacher education in Africa was inspired by the words from Nelson Mandela: "Education is the most powerful weapon which you can use to change the world".	Debate and survey process carried out in the Tuning LA meetings	
	Generic competences list	COMMON LIST OF GENERIC COMPETENCES AMONG ALL SAG			
		generic competences were categorized as: instrumental, interpersonal, systemic			

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

		Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Results	Cycle level descriptors	PARTICIPANTS HAVE PRODUCED CYCLE LEVEL DESCRIPTORS AT PROGRAMME LEVEL FOR THE FIRST AND THE SECOND CYCLES FOR EACH OF THE SUBJECT AREAS INCLUDED IN THE PROJECT.			
		Dublin Descriptors			
	Reference points	The outcome of the consultation process is reflected on the reference points, generic and subject-specific competences	Communities of Learning from different parts of the world have identified the core elements in terms of competences that would make a degree identifiable and hence recognizable.	Three dimensions of the profile: professional; academic; and social, each including related competences.	Competences described by the Tuning Russia project should be used as reference points by programme developers but are not meant to be interpreted as prescriptive.
Education Area	Definition of the Education area	The establishment of education in the HE system responded to the development of mass systems and formal education throughout each continent and the consequent need to provide systematic education or training for the teachers who would staff the schools	For the PanAfrican organisation, the realisation of an integrated, peaceful, prosperous continent must of necessity require "the development of African human resources", a process that must be based on the establishment of a quality education for all	The role of education is to educate professionals in academic, professional and social dimensions for professional performance within different contexts and managerial roles, public and private services, universities, education research centres, and other emerging occupations.	Education has an integrated character, which synthesizes knowledge of pedagogy, psychology, methodology of teaching and other human sciences
	Branches of the Education area	Education comprises two strands: Education Science and Teacher Education	Historically, du'ti fa' (work learning) has been the main strategy for developing life skills; even today, the advent of institutional learning has not displaced it.	Education philosophy, sociology, anthropology, policy and psychology; didactics, curriculum, pedagogic theories, management and coordination, work experience	Educational Psychology, Teacher Education, Special Education and Vocational Education

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Education Area	Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Local context or regulations	Teacher Education is strongly regulated in most member states of the EU, and internal regulation may not always be fully in tune with other regulations influencing HE. Today in EU all secondary school, almost all primary school and many pre-school teachers are educated to first degree level or equivalent.	Africa has the lowest enrolment rates for higher education in the world. [...] The African context is a communal context where things are done together, created together and shared together.[...] Ubuntu philosophy as a methodology for reconciliation: "A person with Ubuntu is open and available to others, affirming of others, does not feel threatened that others are able and good"	Great diversity of names of degrees in the subject area of education in LA, although some common shared criteria are identified	The requirements for the basic outputs of Bachelor and Master degrees are stipulated by the Russian Federation State Educational Standards
Possible occupations of the Education area	1st Cycle: Teaching in schools and pre-schools, nurse education, further education, Universities, vocational education, museum education, community work, educational administration, counselling, educational services. 2nd Cycle: leadership and managerial roles in those areas	teachers in primary secondary, vocational/ technical and higher education	primary, secondary, higher education, pre-school teachers	teacher, educational psychologist, teacher-pathologist, instructors, social teacher,master of vocational training.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

		Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Approaches	New role of teacher	Teachers have responsibility to "extend the boundaries of professional knowledge through a commitment to reflective practice, through research and through systematic engagement in continuous professional development from the beginning to the end of their career" (EU Commission)	Role of the teacher in society/teacher as an agent of change [...] Ubuntu ties closely with the recent concepts of peer education or learning communities, where learners do not recognise only the teacher as the source of knowledge, but also learn from each other.	Lecturers focus on learning and on developing the students' competences. Students take on an essential role in their own developmental processes	There is a shift from teacher-transmitter of knowledge to the tutor, consultant, moderator of the educational process.
	Consensus reaching	As in all of the discussion the Education SAG held, what was sought was consensus around a core of understandings that could form a basic framework for continuing dialogue	After the description of the contextual landscape, the group conducted an exercise aimed at defining components of the teacher education bachelor's degree.	Intense process of consensus building among the group participants with regard to what graduates from teacher education programmes should know, do and value.	Group discussion studying the ways the subject degrees are organised in the different regions and in other countries.
	Sharing expertise and practices	Educationists from across Europe have significant contributions to make to the debate, and much practical experience to share.	Members of the Joint Africa-European Union Strategy Tuning Seminars recommended enhancing the mobility of staff and students to ensure a greater exchange and sharing of ideas, expertise, talents, facilities and activities.	They develop a common language to problems in higher education to be understood and take part in designing a set of tools that are useful for their work, and which have been devised and produced by other academics. They are able to take part in a platform for reflection and action about higher education	

ISSN: 2340-8170 • ISSN-e: 2386-3137, Volume 3, Issue No. 1, November 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Approaches	Tuning Europe	Tuning Africa	Tuning America Latina	Tuning Russia
Learning outcomes assessment	Investment in developing and sharing a wide range of the new or revised assessment techniques to match the increased variations in approaches to teaching and learning in HE are strongly recommended	One of the subject specific competences to be achieved by teachers students is: Use a range of assessment skills to set, mark and grade learners' achievement	competence-based curricula allows constant knowledge and monitoring of the student, leading to better assessment	The multifunctional and meta-subject character of competences requires the development and application of complex indicators, various assessment tools, methods and special ways of interpreting learning outcomes.
Credit system	Tuning has given attention to the Europe wide use of the student workload-based European credit transfer and accumulation system (ECTS). […] It can also facilitate program design and development	A system of interchangeable credits works logically only if the key criteria of learning are shared across countries and universities. At this stage, institutions reveal considerable variation in the number of credits allocated to programmes and years	Students' work volume has been reflected in an agreement to establish the Latin American Reference Credit (CLAR), and all studies are based on this	Learning outcomes and assessment criteria together determine the credit allocation requirements, while a grade is given on the basis of students' achievements, which might be above or below the credit-allocation benchmark

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

The selected projects for this first study phase were the completed Tuning projects carried out so far (not feasibility studies) since it was important to have a deep understanding of the whole development of the methodology and its features: Tuning Europe, Tuning Africa, Tuning Latin America and Tuning Russia. Reports and documents[33] related to these major projects have been analysed, with a particular reference to the "Education" Subject Area Groups, which are the major area of interest of this study on competence-based learning approach. The synoptic table (Table 1) shows commonalities and differences in definitions, results, features of the education area and approaches among the projects. Whilst not exhaustive, this first part of the study shows major cross-cutting themes relevant for an initial understanding of the methodology to further investigate practices of teaching according to the competence-based approach. The researcher coded themes emerging from the documents and grouped them in categories.

Tuning appears first of all as an opportunity to clarify the terminology, deepening concepts such as competence, learning outcomes, student centred approach and related teaching and learning methods and quality assurance. Across the different projects considered, the majority of the results are similar and common. However, it is clear that there has been an evolution in the philosophy and in implementation. Some key elements as the subject-specific and generic competences lists, cycle level descriptors, consultation process, Tuning centres — relevant since the very beginning — have been deepened and enhanced with a clearer and shared understanding and enriched by the introduction of new conceptual elaboration such as meta-profile and reference points. Beside the variable "time", it is important to consider the variable "context": Tuning, as a worldwide phenomenon, touched many different countries and regions, and the core methodology has been embedded in the local understanding and structures of educational systems. For this reasons, definitions and branches of Education area, local contexts and regulations, possible occupations of graduates in Education programmes have been mentioned in the table and will be the basis for discovering

[33] Sources of study and analysis:

— Tuning Europe: Reference points for the design and delivery of degree programmes in Education.
— Tuning Russia: Reference Points for the Design and Delivery of Degree Programmes in Education, 2013.
— Tuning Africa: Tuning and Harmonisation of Higher Education: The African Experience, 2014.
— Tuning Latin America: Higher Education in Latin America: reflections and perspectives on Education, 2014 + Reflections on and outlook for higher education in LA, 2007.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

possible diverse impacts of Tuning in teaching approaches. The last element investigated in this comparative analysis is some of the approaches of Tuning has developed which reflect its core philosophy and way of thinking. The most relevant issues found were: credit system; new role for teachers; consensus reaching; sharing expertise and practices; and learning outcomes assessment. Besides offering frames of interpretation, the methodology offers some key inputs for reflection, for deep analysis of teaching and learning as individual and collective phenomena. The chance to share, debate and develop a network of interconnected academic and student communities seem to be the heart of the process.

III. **Research design**

III.1. *Research method*

In the empirical part of the study, the researcher has opted for *qualitative empirical research*. Qualitative research is based on a view that social phenomena and human dilemmas (Guba and Lincoln, 1984) and the nature of cases are situational. This paper analyses the practices of teaching based on competence-based approach (CBA) from different political, institutional and cultural perspectives. The crucial factors affecting teaching practices and the contribution of the Tuning approach need to be explored and their rationale described. Therefore, the researcher chose the case study approach to address the defined research questions. Yin[34] defines case study method as an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. As explained in the next paragraph, twelve case studies have been conducted through *semi-structured interviews*. Combining narratives of different case studies, a *multiple case study analysis*[35] was chosen, since multiple cases — adequately sampled — can help in finding answers relevant for other similar settings, and can deepen understanding and explanation of the phenomena under study. For reliability and validity requirements, as Yin[36] suggests, a field guide has been created, detailing all

[34] Robert K. Yin, *Case study research: Design and methods* (3rd Ed.). (Thousand Oaks, CA: Sage, 2003).

[35] Robert E. Stake, *Multiple Case Study Analysis*. (New York: The Guildford Press, 2006).

[36] Robert K. Yin, "Studying phenomenon and context across sites". *American Behavioral Scientist, 26, (*1982): 84-100.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

the phases of the process, from research questions to information to be collected and procedures to be followed, so that other researchers could replicate the study. The documentation of the research process is described below in the figure 2 as a chain of evidence[37] for possible replication. The use of multiple measures such as documents/reports and interviews as well as periodic sharing of the process and results with the researcher of Deusto International Tuning Academy (data triangulation) enhanced internal validity.[38]

[37] Kathleen Wells, "Scientific issues in the conduct of case studies". *Journal of Child Psychology and Psychiatry, 28,* (1987): 783-790.

[38] The Author expresses deep thankfulness to Dr. Maria Yarosh from DITA for the continuous support during the scholarship, providing feedback and guidance.

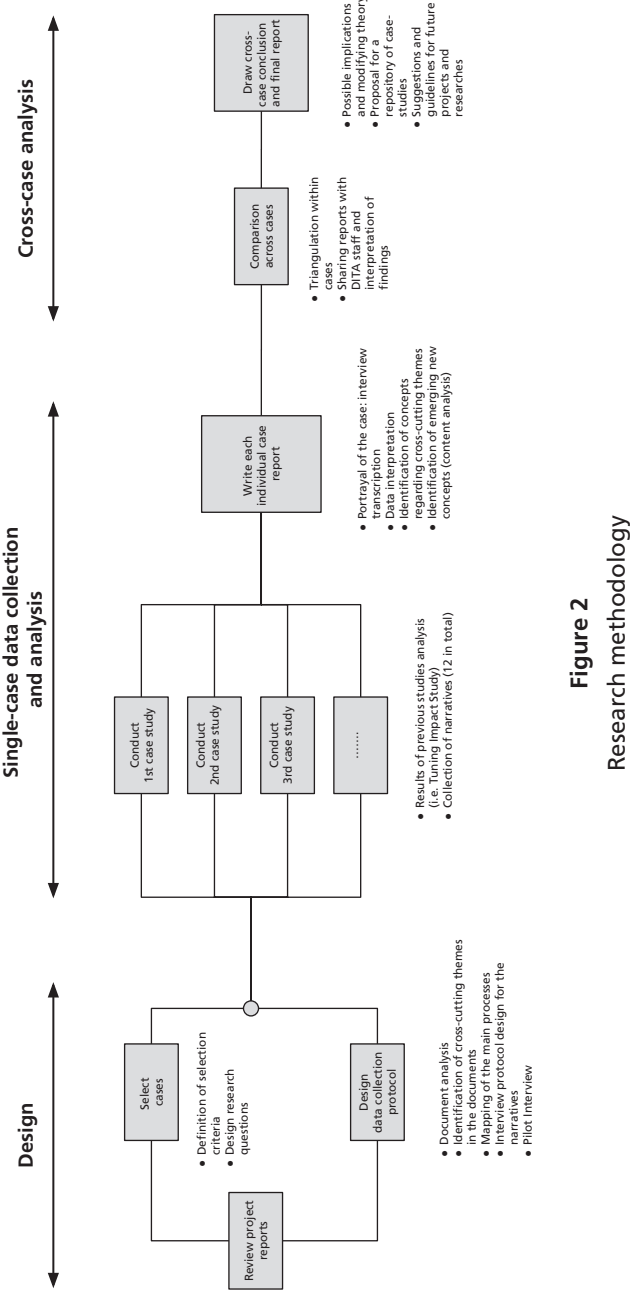

Figure 2

Research methodology

Abbreviations: DITA = Deusto International Tuning Academy.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

III.2. *Research questions and sample*

The goals of this qualitative study were:

(a) To collect descriptive information about university teaching practices according to a competence-based approach, identifying key elements.
(b) To examine the contribution of Tuning to support academic innovation in this perspective and to draft possible suggestions for future development of the methodology.

It is relevant to choose appropriate cases,[39] based on characteristics that are important for the purposes of the study, to ensure a comprehensive and correct understanding of the phenomenon investigated. The criteria for the selection of participants combined both scientific and organisational elements, as follows:

— Teachers from subject area group (SAG) *"Education"* (belonging to different universities in different Countries) *involved in previous completed Tuning projects*. As in the previous analysis of documents, the reason for choosing completed project such as Tuning Europe, Latin America, Africa and Russia was that to have a picture as complete as possible of the methodology in all its features. Moreover, the reason for choosing the subject area Education was mainly related to addressing people expert in the teaching methodology in order to deepen, both at theoretical and practical level, key aspects of implementing CBA.
— *Previous or current experience* in their university *as a teacher* (and, also, possible university managerial role), to collect real experiences and reflections on them.
— People who have possibly *contributed to project publications or reports*, which require further reflection and analysis on the project findings.
— SAGs coordinators have been involved as a university representative, not as group manager, since there is no aim of representativeness of each institution.
— People available for a distance interview between January 12th and February 8th (period of the scholarship).
— English speaking people or at least Spanish speaking.

[39] Robert E. Stake, *Multiple Case Study Analysis*. (New York: The Guildford Press, 2006).

The researcher obtained information from DITA staff regarding faculty names and emails and developed an initial list of potential participants in the study by including teachers who matched the criteria. The list included 24 faculty members, who have been contacted by email. A first round of email has been sent with a subsequent reminder and nine people answered by accepting the interview. A second round of invitation emails were sent to the Spanish-speaking teachers, offering to run the interview in Spanish instead of English. Three more people offered availability, and the total number of participants was limited to twelve so that the qualitative data for the study would be manageable.

In Table 2 some general information of the twelve participants might be found.

Table 2

Participants to the study

University	Academic role	Previous experience (years)	Project attended
Tver State University	Rector	20+	Tuning Russia
University College Dublin	Emeritus professor	30	Tuning Europe
University of Deusto	Professor	20	Tuning Europe
Novgorod State University	Professor	18	Tuning Russia
Eduardo Mondlane University	Dean of Faculty	21	Tuning Africa
University of Namibia	Dean of Faculty	18	Tuning Africa
Mogadishu University	Chief registrar	11	Tuning Africa
Tula State Lev Tolstoy Pedagogical University	Dean of Faculty	23	Tuning Russia
Universidad Pedagógica Nacional Francisco Morazan	Professor	25	Tuning Latin America
Univerisity of Genova	Former professor, former Bologna expert	40	Tuning Europe
Universidad Nacional de Cuyo	Dean of Faculty	25	Tuning Latin America
Universidad Núr	Dean of Faculty	24	Tuning Latin America

The interviews lasted for about one hour each on the average. They were conducted through Skype connection on an agreed timetable. Permission was sought to tape-record each conversation, and anonymous treatment of data was guaranteed.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

III.3. *Interview protocol*

All interviews started with a brief presentation of the research and the researcher and a request of a brief introduction of participant background information. The interview protocol has been tested in a preliminary pilot interview, and two items have been rephrased. In Table 3 below the final questions are shown:

Table 3

Interview protocol

— To what extent do you use learning outcomes and competences in designing a programme or a module?
— How do you choose the most appropriate teaching, learning and assessment strategies to allow your students to achieve the intended learning outcomes?
— What are the best methods to involve students as active actors of the learning process?
— Do you think that competence-based approach — and, in particular, the development of generic and subject-specific competences — improves students' performance and better prepares them to find a suitable job?
— Do you find it useful to have common international descriptors in the same subject areas across different universities?
— Have you been in contact with other colleagues from other institutions to discuss and share your current problems concerning competence based learning? To what extent might the higher education intercultural community be useful in that sense?
— What tool/concept/experience did you find more useful to enhance your real teaching practice during and after the participation in a Tuning project? (reflection and transfer from beliefs to practice)
— What are the major problems you have encountered in using the Tuning conceptual framework and methodological approach? How can the methodology be improved?
— How did you share the Tuning methodology with your colleagues in your University? What was their feedback?
— Which can be the contribution of Tuning methodology to teachers' professional growth and academic innovation? What aspects can be improved in order to provide meaningful teacher training for implementing competence based learning?

III.4. *Data analysis*

All the narratives has been recorded, transcribed and categorised; all the results were derived by conducting a content analysis of the interviews'

transcriptions using the Atlas.ti software. The categories and dimensions emerging were compared with the previous dimensions identified in the literature and document analysis, in a dialogical approach between bottom-up data collecting and a top-down data interpretation.[40] Content analysis yielded thematic categories, which enabled the researcher to have a first idea of teaching practices of implementation of CBA across different contexts and of the present and future Tuning contribution. The data on each case were first processed via a 'within-site' and then a 'cross-site' analysis to find similarities and differences between the different cases,[41] Each case was treated as separate offering relevant information to the phenomenon, not to represent a single university or a single Country and not with the aim of comparing different contexts. Concepts regarding cross-cutting themes highlighted above were identified as well as new emerging concepts. In the paper, the results of the 'cross-site' analysis are stressed and visually represented in some conceptual maps elaborated with Mindjet software. The discussion of findings leads to an attempt of SWOT analysis of Tuning contribution to academic innovation and suggestions for future development of the methodology.

IV. **Findings**

The categories that emerged from the multiple case study are next described. Three visual interpretations of themes emerged are presented below, to answer the two research questions. It should be noted that the categories may include overlapping ideas about the meaning of teaching experience.

IV.1. *Competence-based approach (CBA): understanding and challenges of the approach*

Regarding CBA, codes emerged from the text were grouped into four main dimensions: understanding of the concept; implementation; impact on students; and open challenges (see figure 3).

---

[40] Paola Milani and Elena Pegoraro, *L' intervista nei contesti socio-educativi: una guida pratica* (Milano: Carocci, 2011)

[41] Matthew B Miles and A M Huberman, *Qualitative Data Analysis* (Thousand Oaks, CA: Sage, 1994).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

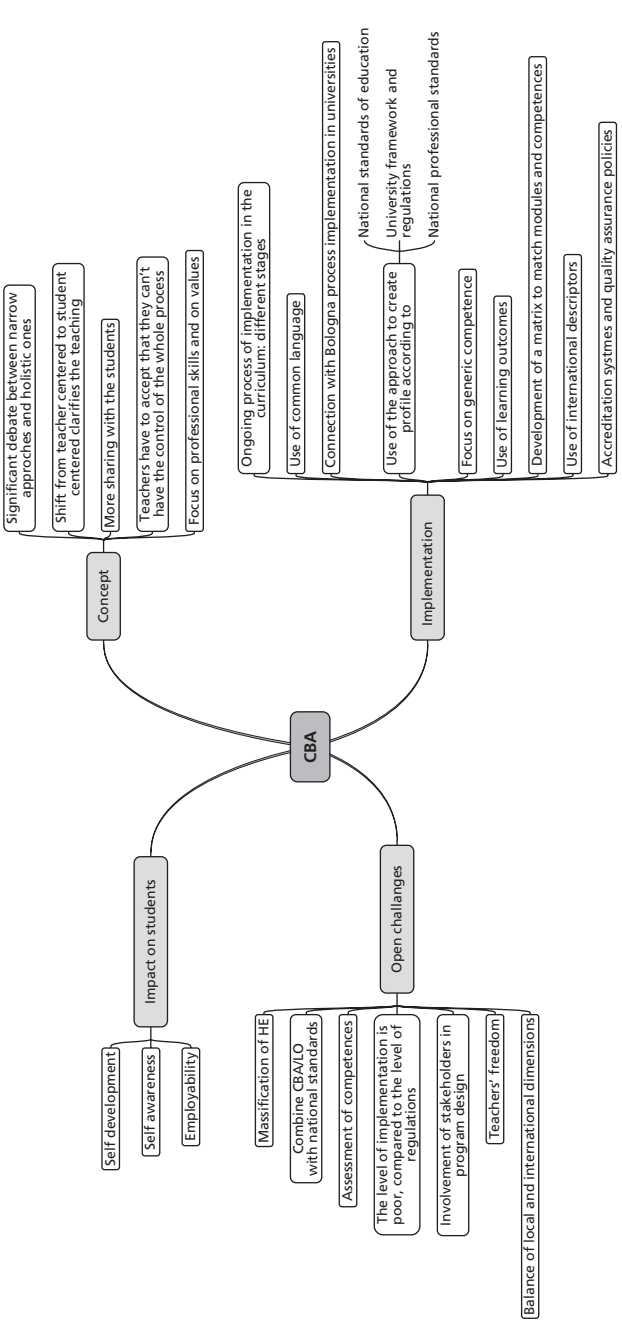

Figure 3

Competence-based approach

Abbreviations: CBA = Competence Based Approach.
HE = Higher Education.
LO = Learning Outcomes.

Participants showed interest and awareness about the main shift to the use of the concept of competence in higher education towards a more *student-centred teaching*. The concept, begun with the Bologna Process, is still very debated and covers not only knowledge but also *social values and professional* skills of students, who are future workers and citizens. Teachers interviewed seem happy about this approach and its possible impact on students' autonomy and responsible learning. They particularly stress the fact that CBA can contribute to students' self-development, self-awareness and employability. However, they are still facing the difficulty of *losing control of the teaching process* as a whole. Therefore, they find it difficult to switch to this new paradigm. It is particularly interesting to see the declared level of implementation, which is not homogeneous and seems to be still an ongoing process. Many teachers underlined the relevance of having *international descriptors* and a *system of credits*, which allow transparency and mobility. As pointed out in the theoretical framework referring to Kiffer and Guy,[42] competence is situational, and refers to a combination of appropriate resources used in a relevant manner in a context. Participants highlight that implementation of CBA is complex, due to the high numbers of variables to be considered, both at the course and individual level. In order to create programs oriented to the development of competences, national *standards of education*, *university frameworks and regulations* as well as *national professional standards* have to be considered as products of institutional, cultural, social and economic stakeholders. In this context, the concept of *learning outcomes* might offer clarification to determine the level of competence — as proposed by the Tuning methodology presented in the theoretical framework of the current paper — as well as other tools to make CBA real.

Many open challenges have been identified, stressing the fact that, if the CBA approach seems to be really embedded in regulations, it is sometime difficult to foster it in daily practice. Indeed, on one hand, teachers are still defending their freedom in teaching and are more focused on research, and on the other hand, massification of higher education implies growing numbers of students, not always motivated to learning, but in some cases only to obtaining a final certificate. Another major aspect perceived as challenging is the *assessment of competences*, namely the way in which is possible to capture and evaluate competences, as well as the balance between local dimension of higher education (including all local stakeholders) and international one.

---

[42] Kiffer Sacha and Tchibozo Guy, "Developing the Teaching Competences of Novice Faculty Members: A Review of International Literature", *Policy Futures in Education* 11(3) (2013): 277-289. DOI: 10.2304/pfie.2013.11.3.277

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

IV.2. *Teaching methods according to CBA approach*

From an overall view of the competence-based approach, it was interesting to analyse texts to investigate the teaching practices used, in particular the teaching and learning activities (TLA) promoted. As shown in the theoretical framework, Entwistle[43] highlights that teaching activities are influenced by teachers' conceptions of teaching, themselves influenced by departmental/university culture, academic community and validating bodies. These elements determine how course materials are organised as well as the learning environment is implemented. In consistency with this theoretical framework, participants interviewed mentioned some relevant contextual factors in choosing TLA, such as *size of the class, nature and level of the students, experience of the teacher in using a certain methodology*. Moreover, there seems to be a need to balance individual and organisational aspects in selecting appropriate teaching methods. In some cases there are *university regulations* to be followed, in order to have an harmonic integration with other colleagues teaching in the same program, in others there is still a strong emphasis on the *teacher freedom to teach.*

The three components identified by Baeten, Struyven and Dochy[44] were used to interpret some characteristics of the TLA used by participants of the study for the development of competences (see figure 4). For the first component — the *active involvement of the students* — teachers mentioned the importance of *involving students in doing something* in order to relate learning with their future lives and jobs; the importance of *letting them discover* some concepts instead of explaining them and build knowledge from their *expectations* on the subject; the importance of using *technology* and tools such as *learning contracts and portfolios* to collect experiences and products and elaborate autonomous reflection. The second component concerns the new role of teacher — as emerged also from cross-cutting themes in the above Tuning document analysis —, who switches from being a transmitter to being a *facilitator,* which involves for example *teamwork, cross-disciplinary projects, feedback to students, entertainment, balance between practice and theory in teaching*. The learning activities as well as the assessment ones should be "*authentic assignments*", and that is the third

---

[43] Neol Entwistle, *Concepts and conceptual frameworks underpinning the ETL project*. Occasional Report 3, Enhancing teaching-learning environment (2003).

[44] Marlies Baeten, Katrien Struyven, Filip Dochy, "Student-centred teaching methods: Can they optimise students' approaches to learning in professional higher education?", *Studies in Educational Evaluation* 39 (2013): 14-22. DOI: http://dx.doi.org/10.1016/j.stueduc.2012.11.001.

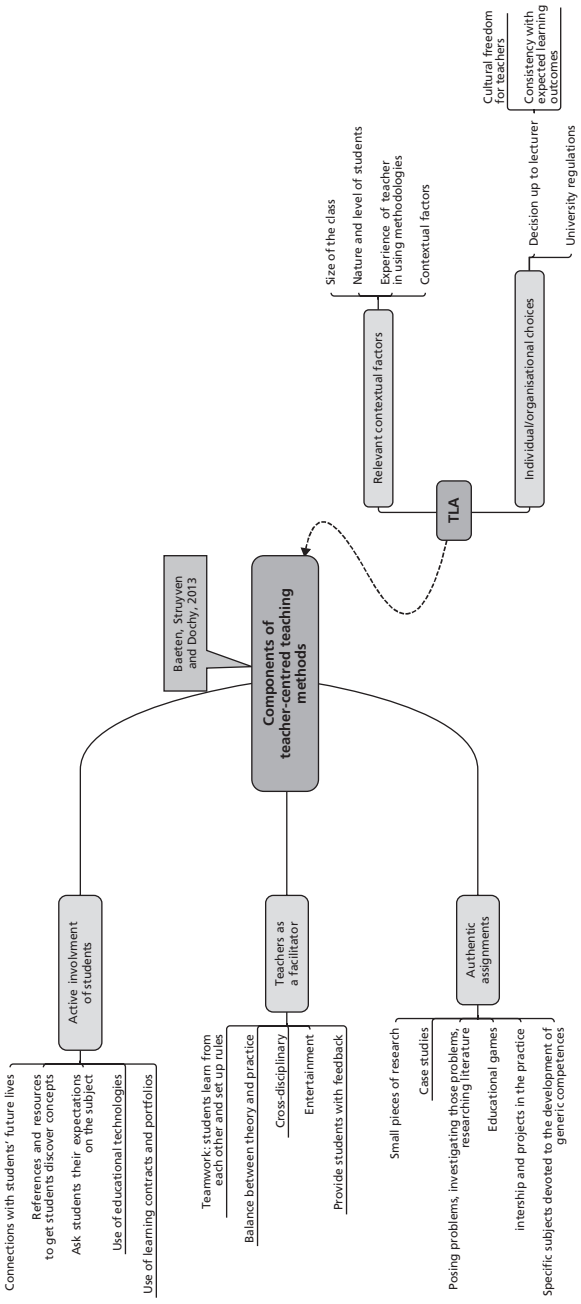

Figure 4
Teaching methods for competence-based learning

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

component. Participants mentioned many possible activities, for instance, small *research projects, problem-solving, educational games, internships* and practical *case-studies*, activities/subjects specifically devoted to the development of *generic competences.*

IV.3. *Tuning contribution to support academic innovation in this perspective*

The second research question of the study aimed basically at understanding and deepening the role of the Tuning methodology in the implementation of a competence-based approach to teaching. Many of the outlines emerged from the document analysis were touched and discussed and in figure 5 a visualisation of the codes grasped from the transcripts is provided.

First of all, we might distinguish between the process of Tuning, the tools considered relevant, the dissemination and the problems still open. As for the process, teachers highlight the importance of creating a dialogue with colleagues from the same area and reflect together on the same concepts, collecting possible different points of views and discussing the possible different applications in different contexts. On the same line, it seems relevant to have the chance of *sharing practices*, and *developing conceptual frameworks* to design programs, by validating the current ones with the feedback of a critical friend. The value of this mutual support is not only limited to meetings in presence during projects, but it also influences the time between meetings, as a space for *review and integration of new concepts* and models in the own institution. The *international dimension* of the Tuning approach seems to be also highly appreciated, as an opportunity to expand the view of a phenomenon and to create a network of contacts. The bottom-up approach creates an *open atmosphere*, with enthusiasm and commitment in starting or continuing a process of *questioning the state of the art of teaching* in academia and moving towards a more student-centred teaching. The value of the process reflects the usefulness of some outputs and instruments identified by participants. They found particularly relevant to learn how to have a clear structure of the *process* with steps and evolution. Moreover, some specific tools such as *stakeholder consultation, learning guide, framework of qualifications and descriptions, metaprofile*. Participants find it useful also to have examples from other projects worldwide to possibly adapt them to local contexts. If the methodology seems to be quite clear, implementation in practice in universities appears more difficult. As dissemination activities teachers reported that they have organised *local meetings* and presentations, also to the administration, and have *tried the methodology* in re-drafting curricula, involving some colleagues in local reflection.

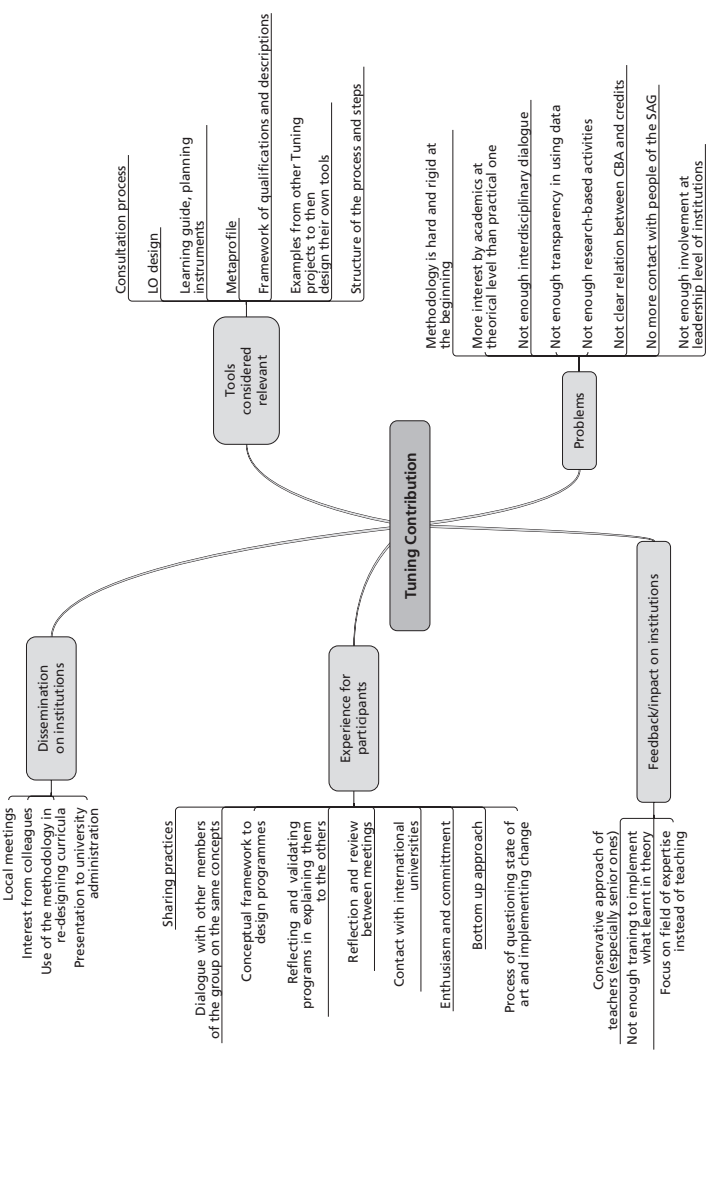

Figure 5

Tuning contribution to support academic innovation

Abbreviations: CBA = Competence Based Approach. SAG = Subject Area Group. LO = Learning Outcomes.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

However, some issues remain problematic. In general, in the attempt of disseminating the methodology, the feedback from colleagues show some *resistance*. Firstly, there is probably not enough training and support for local implementation, and quite often teachers are more focused on research on their field rather than on teaching. Secondly institutional change is never an easy task. Therefore, there is a general tendency to maintain the *status quo* since it is known and less risky and time consuming. Some teachers highlight the *rigidity* of the methodology, especially at the start of each project, with some unclear relations between concepts (such as between competence and credits). The use of Subject Area Group (SAG) is interesting but does not allow *interdisciplinary* dialogue, which might also be enriching; some work across SAGs may allow sharing of different perspectives. It is in any case difficult to maintain *contacts* with colleagues at the end of the projects attended. Moreover, teachers participating in these projects might not have all the same positions and roles within their university, therefore *they may not have the leadership of implementing real changes* at institutional level, but only at individual level. Some would like to enhance *transparency* in using data collected as well as clear selection criteria or call for joint projects.

As a last point, they miss the promotion of some *research-based activity* related to their work on Tuning that some of them would be interested in carrying out to better integrate their research outputs with Tuning.

To summarize findings on the Tuning methodology's contribution to competence-based approach and appropriate teaching and learning activities, a synthesis is proposed below through a SWOT analysis. The SWOT is not aimed to be exhaustive, but to give an overview of some key strengths, weaknesses, opportunities and threats identified in the multiple-case study that might be useful for improvement and development:

— STRENGTHS: common reference framework, important and useful tools (i.e. templates; profiles; teaching and learning methodologies), experience with colleagues, development of reflection, international dimension, enthusiasm, sharing practices.
— WEAKNESSES: some rigidity of the methodology, lack in the implementation of CBA approach in teaching practices (in particular assessment tools), difficulty to maintain contact with colleagues, need of more research based activities.
— OPPORTUNITIES: more involvement of leadership level in university and professions, interdisciplinary dimensions, local training, online resources, database of examples, research activities, more dialogue with existing network of HE and staff development.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

— THREATS: conservative approach of academics, risk of achievement of theoretical but not practical level, risk of limited impact.

V. **Discussion**

The key themes emerging from this analysis and their possible implications are discussed below. Suggestions and guidelines for future projects, training and researches of the Tuning Academy are provided for possible implementation. The crucial relationship *between teaching, learning and research,*[45] as mentioned in the theoretical framework, emerges from this study. The teachers interviewed work in the area of Education, so they believe it is important to enhance research opportunities upon teaching practices. In the table 4 below some ideas collected during the interviews are summarised and framed within some already existing international practices. On one hand, participants are willing to undertake some *research on their own teaching,* such as: scholarship of teaching and learning;[46] or joint publications/presentations with other Tuning colleagues; or grants to visit other advanced institutions. On the other hand, they would be interested in having some *research database and tools* as a powerful resource on the new trends and common issues in teacher training and on frontline academic innovative practices worldwide. A further connection with international networks of higher education might be helpful, to establish connections and scientific collaborations.

In line with a more integrated approach that considers theory and practice as part of the same process, some ideas for training are also provided that Tuning Academy might consider for the future implementation. From the participants' comments, further training is needed. Educational technologies might be relevant tools for this implementation. *Moocs and eLearning initiatives* can offer resources and support for distance and foster community building between professionals. Moreover, the creation of a well-trained

---

[45] Marianne Bauer and Mary Henkel, M, "Responses of Academe to Quality Reforms in Higher Education: A Comparative Study of England and Sweden", *Tertiary Education and Management*, 3 (3) (1997): 211-228. DOI: 10.1007/BF02679385.

[46] The Scholarship of Teaching and Learning (SoTL) is an emerging movement of scholarly thought and action that draws on the reciprocal relationship between teaching and learning at the post-secondary level (Boyer, 1990). An important goal of SoTL is to enhance and augment learning amongst and between individual learners by investigating the many features of discipline specific expertise and best pedagogical practice (McKinney, 2006). For more info see: http://www.stlhe.ca/sotl/

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Table 4

Suggestions for the Tuning research, training and projects

RESEARCH	— Scholarship of teaching and learning (SoTL) for every subject — More focus on joint publications and presentations at international conferences — Call for grants and visits to advanced universities — Open access database of data collected (including the data analysis) — Open access repository of case studies — Further contact with national study centres, national and international networks, and with local units at faculty for educational development — Analysis of educational development initiatives worldwide and intercept trends
TRAINING	— Online Mooc: theories, examples from other universities, contact people and coordination of local initiatives — Consultation service on specific problems — Visit by experts to receive some external feedback — Group of Tuning consultants across the world accredited to provide training (maybe from Education)
PROJECTS	— Protocols of transparency in selection, sharing data and results — Practical labs during the projects, to avoid the risk of only theoretical perspectives — Interdisciplinarity across SAG — Assessment of competences: tools and examples — Methods of building partnership with students: increasing engagement — Development of validated tools for local need analysis in universities (for students and teachers) — Involving in projects both teachers and leaders in university — Call for paper for practices sharing — Establishment of a more structured Tuning network for sharing and connecting people, faculty learning community

group of Tuning *consultants* across the world could be a powerful resource to offer consultations and training especially in universities that require it. Since Tuning addressed the needs of universities and academics for fifteen years, by promoting a bottom-up approach through several projects, some suggestions for future projects are also provided. Participants showed more interest in possible *projects focussing on implementation*, including tools for assessment of competences, practical laboratories, methods for engaging students in the learning process as a partner to the teaching process. It might be interesting to involve people with a similar role in their own institution in

projects, to allow a better sharing of perspectives and possible future implementation within their universities. The idea of sharing practices seems to be relevant, and possible improvement of it can be considered: for example, the creation of a *call for practice sharing* with a possible publication of them or the development of a structured *network* and *faculty learning communities* across universities might be a powerful resource.

VI. **Conclusions**

This paper has investigated the Tuning contribution to academic innovation through the collection of case studies among some Tuning projects, highlighting methods and tools to implement successful and innovative approaches to learning, teaching, and assessment appropriate for competence-based approach. The literature shows the complexity of the teaching phenomenon and the several variables that need to be considered towards a professional identity which integrates *teaching, learning and research* Active involvement of students, teacher as a facilitator and authentic assignments appear as key features.[47] From *multiple case studies* emerged that there seems to be a good understanding of the student centred approach, but still open challenges in its implementation, due to internal and external factors. On the first side, teachers' freedom as well as lack of pedagogical training represent internal obstacles that requires attention and further investment. At the same time, on the second side, it is not easy to face a new era of higher education system, new required balance of local and international dimensions, new and more demanding students with often the same teaching resources.

The Tuning contribution appears as a relevant tool to support this paradigm shift, however the research highlighted also some critical aspects. Tuning appears indeed as a powerful experience for participants in terms of opportunity to stay in contact with colleagues and learn new ways/tools of questioning their own practice, but some problems still appear in terms of implementation and impact on the institutions. New ideas for future strategies for supporting the improvement of teaching activities have been provided, interpreting needs emerged from case studies and developing them in three perspectives. The first one is a strong research orientation, with the possibility of developing scholarly-based activities and evidence-based good practices

[47] Marlies Baeten, Katrien Struyven, Filip Dochy (2013), Student-centred teaching methods: Can they optimise students' approaches to learning in professional higher education? Studies in Educational Evaluation 39 (2013) 14-22.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

useful to circulate and enrich teachers' learning. The second is the tailoring of training processes to promote the change of the teaching practice, with a major focus on the use of online environments and practical resources such as videos, teaching examples, tips and databases. The third is a possible development of specific projects that can address specific themes, by deepening them from a theoretical, methodological and practical point of view. This integrated vision among teaching, learning and research may represent for the Tuning community as well as for the academic community in general a new and more systemic and effective approach to foster academic innovation and students learning.

VII. **Limitations of the study and possible further development**

The research offers a first overview and reflection on competence-based learning and related teaching and learning practices across different Tuning projects in the area of Education. Findings show different understanding of the CBA, level of implementation and open challenges. Due to the qualitative design of the study, results cannot be generalized, and intercultural dimensions should be carefully considered. The number of teachers interviewed was limited to twelve because the organisation of each interview took quite a lot of time considering different times, languages, availabilities, internet connections. However, a *replication* of this study, focusing on other subjects (preferably from a scientific field), would be particularly interesting to widen the sample and continue investigating deeply the phenomenon, in order to expand understanding and confirm/disconfirm findings.

Moreover, since comparisons are not possible, it might be interesting in long-term future also to carry out a quantitative research, by developing and validating an instrument based on qualitative results. This may be a relevant tool for teachers' need analysis and for possible future development of new projects and training activities. Further integration with faculty professional development models, such as scholarship of teaching and learning[48] and creation of (online) faculty learning communities[49] to start up a shared repository of teaching practices, might lead to further researches and reflections on possible applications.

---

[48] El Boyer, *Scholarship Reconsidered: Priorities of the Professoriate*, (Princeton: Princeton University Press, The Carnegie Foundation for the Advancement of Teaching, 1990).

[49] Milton D. Cox, "Introduction to faculty learning communities". *New Directions for Teaching and Learning*, 97 (San Francisco: Wiley Periodicals, Inc, 2004): 5-23.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Bibliography

Baeten Marlies, Struyven Katrien, and Dochy Filip. "Student-centred teaching methods: Can they optimise students' approaches to learning in professional higher education?". *Studies in Educational Evaluation* 39 (2013): 14-22. DOI: http://dx.doi.org/10.1016/j.stueduc.2012.11.001.

Bauer Marianne and Henkel Mary, "Responses of Academe to Quality Reforms in Higher Education: A Comparative Study of England and Sweden", *Tertiary Education and Management*, 3 (3) (1997): 211-228. DOI: 10.1007/BF02679385.

Biggs John and Tang Catherine, *Teaching for Quality Learning*. New York, McGraw-Hill, 2007.

Bligh Donald, *What's the Use of Lectures?* London: Jossey-Bass, 2000.

Boyer El, *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton: Princeton University Press, The Carnegie Foundation for the Advancement of Teaching, 1990.

Coulet Jean-Claude, "La notion de compétence: un modèle pour décrire, évaluer et développer les competences", *Le travail humain*, 74(1) (2011): 1-30. DOI: http://dx.doi.org/10.3917/th.741.0001

Cox Milton D., "Introduction to faculty learning communities". *New Directions for Teaching and Learning*, 97 (San Francisco: Wiley Periodicals, Inc, 2004): 5-23.

Delanty Gerard, "The university and modernity: A history of the present" In *The Virtual University? Knowledge, markets and management*, ed. Robins K, Webster F (Oxford: Oxford University Press 2002), 31-48.

Entwistle Neol, *Concepts and conceptual frameworks underpinning the ETL project*. Occasional Report 3, Enhancing teaching-learning environment (2003).

Etzkowitz Henry and Viale Riccardo, "Polyvalent knowledge and the entrepreneurial university: A third academic revolution?" *Critical Sociology* 36(4) (2010): 595-609. DOI: 10.1177/0896920510365921.

Etzkowitz Henry, Ranga Marina, Dzisah James, "Whither the university? The Novum Trivium and the transition from industrial to knowledge society", *Social Science Information* 51(2) (2012): 143-164. DOI: 10.1177/0539018412437099.

Europan Commission. *The Bologna Process – reforming universities in the next decade*, 22 April 2009. Available at: http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/615&format=HTML&aged=0&language=EN&=guiLanguage=fr.

Gibbons Michael, Limoges Camille, Nowotny Helga, Schwartzman Simon, Scott Peter, Trow Martin. *The New Production of Knowledge. (*London: Sage Publications, 1994).

Gibbs Graham, "The Relationship between Quality in Research and Quality in Teaching", *Quality in Higher Education*, 1(2) (1995): 147-157. DOI: 10.1080/1353832950010205.

———, 53 Powerful Ideas All Teachers Should Know About, idea n. 20, Ocober 2014, available at: http://www.seda.ac.uk/53-powerful-ideas/

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

González Julia and Wagenaar Robert, *TUNING Educational Structures in Europe II. Universities' contribution to the Bologna Process*. Final report Project Phase II. Universidad de Deusto / Universiteit Groningen, 2005.

Gow Lyn and Kember David, "Conceptions of teaching and their relationship to student learning," *British Journal of Educational Psychology* 63(1993): 20-33.

Kember David, "Teaching beliefs and their impact on students' approach to learning," in *Teaching and Learning in Higher Education*, ed. Barry Dart and Gillian Boulton-Lewis, 1-25 (Camberwell, Australia: Australian Council for Educational Research, 1998).

Le Boterf Guy, *De la compétence: essai sur un attracteur étrange*. (Paris: Editions d'Organisation, 1994).

Lee Jenny J, "The shaping of the departmental culture: Measuring the relative influences of the institution and discipline", *Journal of Higher Education Policy and Management* 29 (1) (2007): 41-55, DOI: 10.1080/13600800601175771.

Lokhoff, Jenneke, Bas Wegewijs, Katja Durkin, Robert Wagenaar, Julia González, Ann Katherine Isaacs, Luigi F Donà dalle Rose, and Mary Gobbi. *A Guide to Formulating Degree Programme Profiles*. Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010.

Milani Paola and Pegoraro Elena, *L'intervista nei contesti socio-educativi: una guida pratica* (Milano: Carocci, 2011).

Miles Matthew B and Huberman A M, *Qualitative Data Analysis*, (Thousand Oaks, CA: Sage, 1994).

Sacha Kiffer and Guy Tchibozo, "Developing the Teaching Competences of Novice Faculty Members: A Review of International Literature", *Policy Futures in Education* 11(3) (2013): 277-289. DOI: 10.2304/pfie.2013.11.3.277.

Samuelowicz Katherine and Bain John D., "Conceptions of teaching held by academic teachers", *Higher Education,* 24, (1992): 93-111.

Shulman Lee S., "Knowledge and teaching: Foundations of the new reform". *Harvard Educational Review* 57(1) (1987): 1-22.

Slavin Robert E., "Cooperative learning". *Review of Educational Research* 50(2) (1980): 315-342. DOI: 10.3102/00346543050002315.

Stake Robert E., *Multiple Case Study Analysis*. (New York: The Guildford Press, 2006).

Stoof Angela, Martens Rob L., van Merriënboer Jeroen J. G, Bastiaens Theo J., "The Boundary Approach of Competence: A Constructivist Aid for Understanding and Using the Concept of Competence", *Human Resource Development Review* 1 (3) /2002): 345-365. DOI: 10.1177/1534484302013005.

Van der Klink Marcel, Boon Jo, Schlusmans Kathleen, "Designing and Implementing Views on Competencies". In *Competencies in Organizational E-Learning: Concepts and Tools*, ed. Miguel A. Sicilia (Idea Group, 2007).

Vermunt Jan D. and Verloop Nico, "Congruence and friction between learning and teaching". *Learning and Instruction*, 9, (1999): 257-280. DOI: http://dx.doi.org/10.1016/S0959-4752(98)00028-0.

Von Glaserfeld Ernst, "A constructivist approach to teaching" In *Constructivism in education* (pp). Eds L. Steffe & J. Gale (Eds.) (Hillsdale, NJ: Lawrence Erlbaum, 1995), 369-384.

Wagenaar Robert, "Competences and learning outcomes: a panacea for understanding the (new) role of Higher Education?", *Tuning Journal of Higher Education*, 1(2) (2014): 279-302.

Wells Kathleen, "Scientific issues in the conduct of case studies". *Journal of Child Psychology and Psychiatry, 28,* (1987): 783-790.

Yin Robert K., "Studying phenomenon and context across sites". *American Behavioral Scientist, 26, (*1982): 84-100.

———, *Case study research: Design and methods* (3rd Ed.). (Thousand Oaks, CA: Sage, 2003).

Zepke Nick, "Threshold concepts and student engagement: Revisiting pedagogical content knowledge", *Active Learning in Higher Education* 14(2) (2013). DOI: 97-107, DOI: 10.1177/1469787413481127.

About the Author

ANNA SERBATI earned a PhD (2010-2013) in Educational Sciences at the University of Padova. Her field of specialization is the research on adult learning with a specific focus on processes and tools for the assessment and certification of competences acquired in formal, non-formal and informal contexts. In this area of research, she published a monograph as well as articles and book chapters and she presented paper in international conferences. She currently is post-doc research fellow at the Department of Philosophy, Sociology, Education and Applied Psychology at the University of Padova, where she also teaches assessment of competences to master students. Her current research interests are academic innovation, teachers training, pedagogical thinking, teachers' collaborative reflection and she leads a research on teachers' professional development and academic educational innovation. Anna collaborates also with the Tuning Academy since 2011 in several projects on competence-based learning.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 19-56
doi: 10.18543/tjhe-3(1)-2015pp19-56 • http://www.tuningjournal.org/

Impact of Erasmus mobility for study on the development of Tuning Europe generic competences, as assessed by outgoing and incoming students in a large university: a revealing analysis[*]

Luigi F. Donà dalle Rose[**]

doi: 10.18543/tjhe-3(1)-2015pp57-98

Abstract: We explore on the basis of a simple survey tool the *perceived* impact of the Erasmus mobility experience on the improvement of the thirty generic competences of the Tuning Europe list. We rely on a self-assessment procedure, i.e. on data collected by the Erasmus Office of the University of Padova, Italy, through end-of-stay questionnaires, as returned by both outgoing and incoming Erasmus students. Processed data yield the percentage number of ticks, by which a given competence was chosen by the answering samples. We introduce a quantity "importance of improvement", which measures the perceived degree of development of a given generic competence during the mobility experience and allows a consistent comparison among different samples. On this basis, we can order the thirty competences according to decreasing perceived importance of improvement in the two above samples. From a general point of view, Erasmus students perceive the most important improvement in instrumental competences. We can then carry out meaningful comparisons between the profiles of competences' improvement of outgoing and incoming students, both in qualitative and in quantitative terms. Such a comparison reveals interesting features linked to the academic and human environments of mobile students. A further step in the analysis describes how country effects give more insight into the previous results. In such a context, we analyze the country impact on each given competence for both outgoing (visiting the country) and incoming (from the country) students, on the country subgroup

[*] I gratefully acknowledge the availability of the International Relations Office of the University of Padova and of its Head Mrs. Roberta Rasa to access its data banks on Erasmus students. More particularly, I express my gratefulness to Mrs. Sabrina Marchiori, who preciously and patiently fed and updated the administrative data, and Mr. Mattia Gusella, who extracted the relevant data from the questionnaires' returns.

[**] Luigi F. Donà dalle Rose (dona@pd.infn.it) is a retired Professor in Theoretical Solid State Physics (University of Padova, Italy) and a European expert in higher education and student mobility issues.

competences' profile and on the exchange of competences, which occurs between paired country subgroups.

Keywords: Generic competences; competence development; Erasmus exchange mobility; student self-assessment; country effects.

I. **Introduction**

Competence based learning is at the heart of the paradigm shift which is occurring at all levels of education since some decades. At higher education level the focus on the developments of both generic and subject specific competences became prominent at the beginning of this century and was the concept around which several pilot projects developed, among them Tuning Europe (2000-2008),[1] which then became a worldwide process. Several aspects of the academic life took new inspiration and thrust from these projects, within an overall reform process of the educational offer at country as well as at institutional level. Within this general context, the basic processes included: planning of the degree courses and their maintenance (in a quickly growing knowledge society and with increasing quality demand); a deep re-visitation of learning and teaching methodologies; rethinking of the assessment tools; a concrete dialogue with entrepreneurs and other societal stakeholders. All these processes fed, and still are feeding, this epochal paradigm shift. By now, not only in the European HE area, but at a worldwide level, many fruitful dialogues occurred, involving comparisons, common perceptions and shared agreements among the grass-root actors at institutional level, mainly students and academics, but also rectors, degree planners, quality agencies and so on. In Europe, a powerful promoter of comparisons and reciprocal knowledge at academic level came from the several existing inter-university networks and from the many related students' exchange programmes, noticeably the Erasmus programme run by the European Commission.[2]

The basic pillar of the Erasmus programme is the full recognition at the home university of studies taken abroad. In this very context, much debate was devoted to whether the difficulties connected to studying in a different

[1] Julia González and Robert Wagenaar, eds., *Tuning Educational Structures in Europe. Universities' Contribution to the Bologna Process. An Introduction,* 2nd ed. (Bilbao: Universidad de Deusto, 2008).

[2] See for an updated guide: European Commission, *Erasmus+ Programme guide, valid as 1 January 2014*, accessed October 24, 2015 at http://ec.europa.eu/programmes/erasmus-plus/discover/guide/2014/documents/erasmus-plus-programme-guide_en.pdf

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

academic environment and using a new language might be recognized in some official manner. Practically all approaches strictly rely on the recognition of those educational activities, which are formally assessed at the guest institution. Nevertheless, some universities introduced flexibility instruments (e.g. bonus credits, see EMQT project final report)[3] related to the development of transversal or generic skills, which occur while studying abroad under an exchange programme. A general and comprehensive study on the impact of Erasmus mobility on the professional preparation of mobile students was prepared on request by the European Commission as early as 2006 by the International Centre for Higher Education Research of Prof. Ulrich Teichler.[4] An impressive *Erasmus Impact Study* on these same (and other) issues was recently edited under the responsibility of a wide consortium of partners, led by CHE Consult.[5] By using a sophisticated and varied methodology, which is able to involve all involved stakeholders, the study identifies, among many quite interesting findings, also those skills, that from an Erasmus student perspective are "*very improved/improved*".[6] In the present piece of work, we explore which are the Tuning competences that are perceived as more affected in those students who experience Erasmus study mobility. As explained below, the tool we use is a very simple one, in line with the pragmatic approach of the Tuning community, which mixes pedagogical experts with experts from other subjects. For those interested in, more refined possible approaches and rich specialist bibliographies can be found in some comprehensive publications and reports.[7]

---

[3] See chapter "Academic quality in exchange mobility" in *Outcomes of the EMQT project*, ed. Managing Committee of the EMQT-Erasmus Mobility Quality Tools Project, a structural network funded by the European Commission (Padova: Universities of Bologna, Deusto and Padova, 2012), 113.

[4] Oliver Bracht et al., *The Professional Value of ERASMUS Mobility,* INCHER — International Centre for Higher Education Research (University of Kassel, 2006).

[5] European Commission, *Erasmus Impact Study: Effects of mobility on the skills and employability of students and the internationalisation of higher education institutions* (Luxembourg: Publications Office of the European Union, 2014), accessed November 12, 2015, doi: 10.2766/75468. The study was carried out under Service Contract EAC-2012-0545 and was run by a consortium, including CHE Consult (leader), Brussels Education Services (BES), Centrum für Hochschulentwicklung (CHE), Compostela Group of Universities (CGU), Erasmus Student Network (ESN). The Study Team was led by Uwe Brandenburg (CHE Consult).

[6] See, as an example, Table 3-15 in European Commission, Erasmus *Impact Study,* 108. Their Erasmus students' sample included several thousands of students. This Study examined fifteen generic skills.

[7] We only quote here the illuminating book by Aurelio Villa Sanchez and Manuel Poblete Ruiz, eds., *Competence-based learning, A proposal for the assessment of generic competences*

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

At the University of Padova, the development, as perceived by Erasmus students, of their own generic competences has been monitored since some years. In 2013-14, Padova University ranked 6th among the top 100 Erasmus sending institutions and 40th among the receiving ones. These facts offer an appropriate statistical basis for the present study.

As a matter of routine, the International Relations Office at Padova University asks all its Erasmus students — both incoming and outgoing — to answer an *end-of-stay* on-line questionnaire in order to monitor and assess their experience abroad. The incoming students answer at the end of their stay in Padova, as a required step in their leaving procedure; the outgoing students answer as soon as they are back in Padova, as a step of their coming back procedure.

The questionnaire mirrors the questionnaire used by the already quoted Tuning Europe project. The questionnaire for incoming students is formulated both in Italian and English language, while the questionnaire for outgoing students is in Italian language. Both questionnaires ask for a two-step answer:

> *step 1: Please indicate five skills that, on your opinion, you've improved among the thirty proposed.*
>
> *step 2: After identifying them, please write the correspondent five numbers in the appropriate boxes (1=most important, 5=less important).* The intention was that students should then place these five skills in rank order of importance.

A list with the short names of the 30 generic competences of the Project Tuning Europe[8] follows: each competence has a box in the questionnaire, where to insert its order of importance among the 5 competences chosen by the respondent. This list, originally in English, was then translated into Italian (relying on an Italian version of the first Tuning Europe report),[9] with

---

(Bilbao: Deusto University Press, 2008), and the quite stimulating report of the ModES project, funded by the European Commission: David Haselbergeret al., *ModES Handbook: Mediating Soft Skills at Higher Education Institutions, Guidelines for the design of learning situations supporting soft skills achievement* (2012). Accessed November 12, 2015, http://www.modesproject.eu/en/the-modes-handbook.aspx.

[8] Julia González and Robert Wagenaar, eds., *Tuning Educational Structures in Europe. Universities' Contribution to the Bologna Process. An Introduction,* 2nd ed.,(Bilbao: Universidad de Deusto, 2008), 31-32.

[9] Julia González and Robert Wagenaar, eds., *Tuning Educational Structures in Europe, Final Report, Pilot Project — Phase 1, carried out by over 100 Universities, coordinated by the University of Deusto (Spain) and the University of Groningen (The Netherlands) and supported by the European Commission (*University of Deusto and University of Groningen, 2003), 72-73.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

few changes (i.e. *oral and written communication in your native language* simply became *oral and written communication; ability to communicate with experts in other fields* became *ability to communicate with not expert people)*. Both questionnaires adopted these changes.

In fact, the responding students interpreted quite differently step 2 of the question, showing its lack of clearness. Some students interpreted it correctly, i.e. giving their ranking for the five previously selected competences; others understood that the proper space should contain an assessment of the importance of that selected competence on a scale from 1 to 5. Thus, in the following, we shall not rely on step 2 answers, but we shall simply infer the *importance of the improvement* of a given competence from the number of ticks it received in the returns of a given student sample to the questionnaire. A natural definition for such an importance would then be the percentage of students who ticked that very competence over the number of students who answered the question regarding competences. This simple and straightforward definition has the inconvenience that when applied separately to two or more samples does not guarantee a correct comparability, since the number of students ticking less than five competences, even though a small number, varies according to the sample, yielding a varying sum of all the competence percentages. In the following we shall discuss the results regarding two main samples, i.e. Erasmus outgoing and incoming students, plus a number of subsamples, for example country subgroups within each one of the two main samples. Thus, we need a renormalized variable — say $\mathbf{I}_{score}$ — which can be defined, for each considered sample, as

$$\mathbf{I}_{score} = f_{sample} \times (\% \text{ of students who ticked / number of answering students in the sample}),$$

where the renormalization factor f_{sample} is a quantity depending on the sample and close to one in our samples and subsamples. Do see Appendix I for more details. Throughout the present piece of work, the *importance of improvement* regarding a given competence in a given sample is expressed by the value of the variable $\mathbf{I}_{score,}$, given as a percentage. When the context is clear, we shall simply use the term *importance*.

As we shall see in detail below, our analysis yields for all considered samples an "order of importance" for the generic competences, the actual value of each competence importance *measuring* the impact that the mobility experience has on the set of the Tuning competences in terms of their improvement, as perceived by the responding students. In other words, it reflects the "importance of the perceived improvement" or even a perceived rate of development of each competence during mobility.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Table 1 summarizes the answering data for the two main samples in the academic year 2013-14.

Table 1
Return data for the samples of OUTgoing and INcoming students

Return data	OUT	IN
Number of students in the sample	1163	680
Answering students	988	595
Answering rate	85,0%	87,5%
Number of meaningful ticks (i.e. competences selected as improved ones)	4788	2595
Number of ticks per answering student (out of the 5 suggested ones)	4,85	4,36

Do notice here the large number of returns for both samples of students, the good and quite similar answering rate and the fact that not all students selected five competences, the incoming students selecting as an average 4.36 competences each against 4.85 selected by the outgoing students.

II. **General results**

Table 2 below summarizes the order of perceived importance of improvement for both outgoing and incoming students. The actual values for the corresponding importance of improvement, as defined above, are given for both samples in Table 5 below, where we shall discuss them thoroughly. Table 2 shows that most competences have the same or very similar position (yellow background in the first two columns) in the two orderings or rankings. Some competences do not obey this rule and this reveals interesting facts, as we discuss below. Moreover, it should be stressed that the actual value for the importance of improvement for a given competence can be quite diverse in the two rankings, even if the competence itself gets a similar position.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Table 2

Order of importance for the improvement of the Tuning Europe generic competences according to the perception of the OUTgoing and INcoming Erasmus students at the University of Padova, academic year 2013-14 (ordered according to the perceived importance of OUT students)

OUT order of importance	IN order of importance	Tuning generic competences
1	2	Capacity to adapt to new situations
2	1	Knowledge of a second language
3	5	Problem solving
4	4	Oral and written communication
5	6	Appreciation of diversity and multiculturality
6	3	Understanding of cultures and customs of other countries
7	10	Capacity for organization and planning
8	7	Interpersonal skills
9	9	Ability to work in an international context
10	8	Decision-making
11	17	Capacity for applying knowledge in practice
12	16	Critical and self-critical abilities
13	18	Teamwork
14	15	Research skills
15	24	Information management skills
16	22	Capacity for generating new ideas (creativity)
17	13	Ability to work autonomously
18	20	Will to succeed
19	12	Capacity to learn
20	11	Basic general knowledge
21	26	Concern for quality
22	28	Ability to work in an interdisciplinary team
23	23	Grounding in basic knowledge of the profession
24	14	Capacity for analysis and synthesis
25	19	Initiative and entrepreneurial spirit
26	27	Leadership
27	29	Project design and management
28	25	Ethical commitment
29	21	Ability to communicate with not experts
30	30	Elementary computing skills

ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Do notice the background colours of the competences: *pink* for the instrumental competences, *sky blue* for the interpersonal and *green* for the systemic competences. This complements Table 3, which gives the percentage weight of the three groups of generic competences (instrumental, interpersonal and systemic), based on the importance of improvement for their own competences, as perceived by the two main samples of the present survey. The percentage weight of each group is simply the sum of the competences' importance in each group, each sum being here renormalized in order to yield a total of the three sums equal to 100%.

Table 3 shows a comparison between the perceived weights of the three groups, considering all 30 competences. In general, we can say that the mobility students perceive the development of instrumental competences as more important. The last column shows the reference weight for the three groups, i.e. the weight, which corresponds to a uniform $\mathbf{I}_{score}$ value for all competences (see definition of uniformity value in Section III).

Table 3

Percentage weight of instrumental, interpersonal, systemic competences in the importance of improvement perceived by the two samples of outgoing (OUT) and incoming (IN) students

Weight of improvement importance *all Tuning competences*	OUT students	IN students	Reference weight *(all competences have equal improvement importance)*
Instrumental	41%	42%	33%
Interpersonal	22%	24%	27%
Systemic competences	37%	34%	40%

The greater impact of mobility on instrumental competences is even clearer if we look at the share in the above weights of the top twelve competences (Top12), as chosen by the OUT and IN samples respectively.

Table 4

Share of Top12 competences in the weights corresponding to all 30 Tuning competences (see Table 3) for OUT and IN samples respectively

Group of competences	OUT	IN
Instrumental	0,85	0,89
Interpersonal	0,78	0,70
Systemic competences	0,63	0,61

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

We clearly see that the share in the perceived weights of the three groups of competences definitely decreases when going from instrumental to interpersonal to systemic competences, a sign that the latter were better developed already at home: of course this is only true in general, since there are some noticeable and interesting exceptions. Indeed, some competences, which are most developed by exchange students, in terms of absolute value of importance of improvement, are not instrumental (see Table 2 above and for the numerical values see Table 5).

Looking at more detail, we see that, within the Top12 competences:

- Instrumental competences — 5 competences are common to both samples: *knowledge of a second language* (2nd in the OUT students' ordering and 1st in the IN students' one), *problem solving* (3rd and 5th), *oral and written communication* (4th and 4th), *capacity for organization and planning* (7th and 10th), *decision-making* (10th and 8th). Moreover, IN students perceive as important: *basic general knowledge* (20th in the OUT students' ordering and 11th in the IN students' one, a surprising gap? See Table 8 below and related comments for a possible interpretation).
- Interpersonal competences — 3 competences are common to both samples: *appreciation of diversity and multiculturality* (5th and 6th), *ability to work in an international context* (9th and 9th), *interpersonal skills* (8th and 7th). Moreover, OUT students show in addition: *critical and self-critical abilities* (12th and 16th).
- Systemic competences — 2 competences are common to both samples: *capacity to adapt to new situations* (1st and 2nd), *understanding of cultures and customs of other countries* (6th and 3rd). Moreover, OUT students select *capacity for applying knowledge in practice* (11th and 17th, quite a gap), while IN students select *capacity to learn* (19th and 12th, quite a gap again!).

It is also instructive to look at the less ticked competences, i.e. those for which no relevant mobility impact occurs, or — better — is perceived. Let us focus on the last five. Three out of them are common to both samples. They are *leadership*, *project design and management* and *elementary computing skills*. Moreover, OUT students include in this less ticked group *ethical commitment* and *ability to communicate with not experts*, whereas IN students include *concern for quality* and *ability to work in an interdisciplinary team*. As we shall discuss below, an analysis by country subgroups of these competences gives a surprising new insight.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

III. **Comparison OUT *versus* IN students**

By analysing the numerical differences between outgoing and incoming students in the perceived importance of improvement (degree of improvement) of the several competences, we can extract further interesting information.

Moreover, it is convenient to keep in mind some reference values for the (renormalized) perceived importance of improvement, as they will become useful in the description of the results. If respondents had ticked all competences uniformly, then the importance value would be 16.7% for all competences (uniformity value or threshold, i.e. 500% divided by 30).

As to OUT students, their Top12 competences, i.e. the ones identified in the previous Section, are all and the only ones having an $\mathbf{I}_{score}$ above this value, with a maximum value equal to 69.2% for *capacity to adapt to new situations*. Below the uniformity value, we find a set of 13 competences, whose importance varies in the range 4% to 15% and finally a set of 5 less important competences, varying in importance between 0.9% and 4%. A similar situation occurs for incoming students, whose Top12 set of competences (see again previous Section) shows a maximum $\mathbf{I}_{score}$ value equal to 61.3% for *knowledge of a second language* and includes two competences below (even though close to) the uniformity value, i.e. at 14.5% and 14.3%. Then we find again a set of 13 competences, whose importance varies in the range 4% to 11.4% and finally 5 less important competences, varying in importance between 2.7% and 4%. As a synthesis and for further reference, we give below the *average* values for the importance of improvement in the three above sets of competences, as found for the two main samples. They are quite similar.

Reference values for improvement importance	Average importance value	
Set of competences	OUT	IN
Top 12 competences	31,4%	31,2%
Competences ranked 13 to 25	8,6%	8,4%
Competences ranked 26 to 30 (importance < 4%)	2,3%	3,3%

Some general comments on the numerical values of the importance of improvement are worthwhile. They are complementary to the qualitative analysis made above, which relies on the simple order of importance. Table 5 below gives the actual $\mathbf{I}_{score}$ values for outgoing and incoming students. These two rankings show only two competences, whose importance of improvement

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

value is above 60%. The first one, which appears in both rankings, is *knowledge of a second language*, an instrumental competence, which is quite an obvious finding for a mobility programme; it will be discussed *below* in some detail in terms of country subgroups. The second is *capacity to adapt to new situations*, a systemic competence, at the top of OUT ranking and really characterizing an important feature for Italian young people, as discussed again below.

Table 5

Rankings (order of importance) of the Tuning competences for outgoing and incoming students, complete of the $\mathbf{I}_{score}$ value for each competence

Tuning generic competences	Importance (all OUT)
Capacity to adapt to new situations	69,2%
Knowledge of a second language	68,2%
Problem solving	31,0%
Oral and written communication	28,6%
Appreciation of diversity and multiculturality	27,2%
Understanding of cultures and customs of other countries	25,9%
Capacity for organization and planning	24,7%
Interpersonal skills	21,7%
Ability to work in an international context	21,1%
Decision-making	21,1%
Capacity for applying knowledge in practice	20,8%
Critical and self-critical abilities	17,2%
Teamwork	14,7%
Research skills	14,6%
Information management skills	12,7%
Capacity for generating new ideas (creativity)	10,1%
Ability to work autonomously	9,6%

Tuning generic competences	Importance (all IN)
Knowledge of a second language	61,3%
Capacity to adapt to new situations	45,5%
Understanding of cultures and customs of other countries	44,5%
Oral and written communication	35,1%
Problem Solving	34,3%
Appreciation of diversity and multiculturality	29,7%
Interpersonal skills	29,5%
Decision-making	24,9%
Ability to work in an international context	24,3%
Capacity for organization and planning	16,8%
Basic general knowledge	14,5%
Capacity to learn	14,3%
Ability to work autonomously	11,4%
Capacity for analysis and synthesis	10,8%
Research skills	10,6%
Critical and self-critical abilities	10,4%
Capacity for applying knowledge in practice	10,0%

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Tuning generic competences	Importance (all OUT)
Will to succeed	9,3%
Capacity to learn	8,6%
Basic general knowledge	6,9%
Concern for quality	6,4%
Ability to work in an interdisciplinary team	5,1%
Grounding in basic knowledge of the profession	5,1%
Capacity for analysis and synthesis	4,7%
Initiative and entrepreneurial spirit	4,1%
Leadership	3,4%
Project design and management	2,8%
Ethical commitment	2,5%
Ability to communicate with not experts	1,6%
Elementary computing skills	0,9%
Total	500,0%

Tuning generic competences	Importance (all IN)
Teamwork	9,2%
Initiative and entrepreneurial spirit	8,9%
Will to succeed	8,5%
Ability to communicate with not experts	8,5%
Capacity for generating new ideas (creativity)	8,1%
Grounding in basic knowledge of the profession	4,6%
Information management skills	4,2%
Ethical commitment	4,0%
Concern for quality	3,7%
Leadership	3,7%
Ability to work in an interdisciplinary team	3,3%
Project design and management	3,1%
Elementary computing skills	2,7%
Total	500,0%

As to incoming students, *capacity to adapt to new situations* is ranked second, but only at a much lower value of importance (45.5%) than the first one, together with *understanding of cultures and customs of other countries* (at 44.5%), this latter competence being valued as low as 25.9% by the outgoing sample (again a large gap). Then we find two sets of competences (one per ranking) whose importance ranges between 35% and 24%. The outgoing set includes five competences, i.e. *problem solving*, *oral and written communication*, *appreciation of diversity and multiculturality*, *understanding of cultures and customs of other countries*, *capacity for organization and planning*. The incoming set includes three competences, which are in a similar position and at similar value as in the outgoing sample, i.e. *oral and written communication*, *problem solving*, *appreciation of diversity and multiculturality*, plus three others, i.e. *interpersonal skills*, *decision-making*, *ability to work in an international context*. These latter three are ranked lower in the outgoing sample, but at a not too different importance value (around 21%), together with *capacity for applying knowledge in practice*.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

The comparative analysis of the results mostly focuses on differences in the perceived importance of improvement for the all thirty Tuning competences.

Table 6

Importance of improvement for OUTgoing and INcoming Erasmus students at the University of Padova: renormalized values and their difference. Competences are ordered according decreasing difference *(the actual order in importance of improvement in each sample is given in the first two columns. A yellow background means equal/almost equal position in the order)*

OUT order of importance	IN order of importance	Tuning generic competences	OUT students	IN students	Difference (OUT minus IN)
1	2	Capacity to adapt to new situations	69,2%	45,5%	23,8%
11	17	Capacity for applying knowledge in practice	20,8%	10,0%	10,8%
15	24	Information management skills	12,7%	4,2%	8,5%
7	10	Capacity for organization and planning	24,7%	16,8%	8,0%
2	1	Knowledge of a second language	68,2%	61,3%	6,9%
12	16	Critical and self-critical abilities	17,2%	10,4%	6,8%
13	18	Teamwork	14,7%	9,2%	5,5%
14	15	Research skills	14,6%	10,6%	4,0%
21	26	Concern for quality	6,4%	3,7%	2,7%
16	22	Capacity for generating new ideas (creativity)	10,1%	8,1%	2,0%
22	28	Ability to work in an interdisciplinary team	5,1%	3,3%	1,8%
18	20	Will to succeed	9,3%	8,5%	0,8%
23	23	Grounding in basic knowledge of the profession	5,1%	4,6%	0,5%
26	27	Leadership	3,4%	3,7%	-0,2%
27	29	Project design and management	2,8%	3,1%	-0,3%
28	25	Ethical commitment	2,5%	4,0%	-1,5%
30	30	Elementary computing skills	0,9%	2,7%	-1,76%
17	13	Ability to work autonomously	9,6%	11,4%	-1,76%
5	6	Appreciation of diversity and multiculturality	27,2%	29,7%	-2,5%
9	9	Ability to work in an international context	21,1%	24,3%	-3,2%
3	5	Problem solving	31,0%	34,3%	-3,3%

OUT order of importance	IN order of importance	Tuning generic competences	OUT students	IN students	Difference (OUT minus IN)
10	8	Decision-making	21,1%	24,9%	-3,8%
25	19	Initiative and entrepreneurial spirit	4,1%	8,9%	-4,8%
19	12	Capacity to learn	8,6%	14,3%	-5,7%
24	14	Capacity for analysis and synthesis	4,7%	10,8%	-6,1%
4	4	Oral and written communication	28,6%	35,1%	-6,5%
29	21	Ability to communicate with not experts	1,6%	8,5%	-6,9%
20	11	Basic general knowledge	6,9%	14,5%	-7,6%
8	7	Interpersonal skills	21,7%	29,5%	-7,8%
6	3	Unders ta ndi ng of cul tures a nd cus toms of other countries	25,9%	45,0%	-19,0%

Table 6 shows this comparison for each competence, in decreasing order of the corresponding difference between OUT and IN students. Positive differences indicate that the importance of a competence was better improved for the OUT group of students and a negative difference for the IN group. The larger differences are at the top and at the bottom of Table 6, while in the middle of the Table we find the competences on which mobility has a similar impact for OUT as well as for IN students. In the difference range between +3% and –3% we find a dozen of competences: of which many have a low perceived improvement during mobility, but on the contrary two interpersonal ones show quite an appreciable importance of their improvement; these latter are:

appreciation of diversity and multiculturality (27.2% in the OUT sample and 29.7% in the IN one)

ability to work in an international context (21.1% and 24.3% respectively).

Again in this very group of competences, which shows a comparable mobility impact in the two samples, three other competences have a modest — but not vanishing — importance of improvement:

- *Capacity for generating new ideas (creativity)* (10.1% in the OUT sample and 8.1% in the IN one)
- *Will to succeed* (9.3% and 8.5% respectively)
- *Ability to work autonomously* (9.6% and 11.4% respectively).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

We shall come back later on some of these competences, when describing country effects.

The largest differences between OUT and IN students in the importance of improvement of competences lend themselves to interesting comments. The largest positive difference occurs for *capacity to adapt to new situations*, being equal to as much as 23.8% (69.3% in the OUT sample and 45.5% in the IN one!). This may be explained easily. As it is well known,[10] most Italian university students live with their families while studying. This is generally true also for Padova students. Thus, Erasmus is most often the first time when these students meet the challenges of a daily life without family support. In many other countries, as a general habit, students live away from the family when at the university. We anticipate here that the country subgroup "outgoing to PL"[11] perceive a 94% importance of improvement for this competence (see Table 10a), an absolute maximum in this survey! On the contrary, among the incoming students only RO students shows an importance of improvement similar to the one perceived by Padova students, while AT, BE, PL, GR, UK and DE perceive the improvement of this competence at a much lower extent (between 33% and 43%).

The second most different perception about the improvement (i.e. the gap) between outgoing and incoming students regards *capacity for applying knowledge in practice*, which scores a difference of 10%. This can be most profitably interpreted by grouping this competence together with four others, which show a similar gap, see Table 7.

Do notice that all these competences ranked higher for the OUT students sample by 3 to 9 positions with respect to the IN students ranking positions and that all appeared within the first fifteen. According to facts and experiences, shared by the author with Italian and foreign colleagues during his long standing commitment in Erasmus exchanges, this gap in importance of improvement between OUT and IN students seems to reflect the Italian teaching-learning approach, which is quite systematic and analytical, but less pragmatic and not much addressed to concrete aspects of life and of job market.

---

[10] For instance, see Corriere Università, *Sempre più "mammoni": Italiani fanalino d'Europa,* February 9th, 2015, at http://www.corriereuniv.it/cms/20Ita15/02/giovani-italiani-preferiscono-restare-casa-in-francia-uk-meta/ ; see also: Directorate General Education and Culture, *Survey into the socio-economic background of Erasmus students* (Brussels: European Commission, 2000), 13.

[11] Here and in the following, we use the same country abbreviations as those used in the web.

Table 7

Competences which are better improved by outgoing students. The first column shows the difference in importance between the two groups (OUT minus IN). The two last columns show the actual I_{score} value for the importance of improvement in the two samples. Rounded values

Competence	Gap	OUT	IN
Capacity for applying knowledge in practice	11%	21%	10%
Capacity for organization and planning	9%	24%	15%
Information management skills (ability to retrieve and analyze information from different sources)	9%	12%	4%
Critical and self-critical abilities	8%	17%	9%
Team-work	6%	14%	8%

On the other hand, another group of competences reveals a quite complementary aspect, thus confirming the above interpretation. Table 8 indicates that the Italian teaching-learning approach is perceived by IN students as being more systematic and as offering deeper insight, in such a way that it promotes a better *capacity to learn*. Please note that *capacity to learn* and *basic general knowledge* (as well as *capacity for analysis and synthesis* even though at a lesser extent) ranked high in the order of importance of incoming students. Indeed, *capacity to learn* shows an importance of improvement among UK students which is as high as 21%, followed by ES and BE students (19%), quite above the value for the incoming students whole sample (i.e. 14%).

Table 8

Competences which are better improved by incoming students. The first column shows the difference in importance between the two samples of students (OUT minus IN). The two last columns show the actual I_{score} value for the importance of improvement in the two samples. Rounded values

Competence	Gap	OUT	IN
Capacity for analysis and synthesis	-6%	5%	11%
Basic general knowledge	-7%	7%	14%
Capacity to learn	-6%	9%	14%

The competence *understanding of cultures and customs of other countries* records the largest negative difference between the OUT and IN samples, i.e.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

–18.7% (25,9% absolute value in the OUT sample and 44,5% in the IN one). It seems that Italian culture and customs are perceived as being quite diverse from those pertaining to incoming students and — in addition — it seems that the stay in Padova quite helped in understanding this diversity. Interestingly, among guest students there is a further difference of importance of improvement (–18%) between students from Southern countries (ES, GR, PT, RO, HR) and students from Northern countries (AT, BE, UK, PL, DE, FR). The latter group perceives an importance of improvement as high as 53%. This corresponds to a large gap between the entire outgoing sample and this group equal to –27%. Such a gap could be interpreted in several ways, but conclusive statements need more investigation. Possible interpretations for the low importance of improvement perceived by outgoing students for *understanding of cultures and customs of other countries* are: i) a better general and cultural preparation of the outgoing students at secondary school level (i.e. a competence already developed at home). ii) lack of interest in the outgoing students for the culture of the visited country, focusing on academic achievements only, under the pressure to acquire credits. This might very well be the case of the subgroup outgoing to DK, a highly selected subgroup of students, mostly visiting *Danmarks Tekniske Universitet (DTU in Lingby, Copenhagen) within the* T.I.M.E. network:[12] indeed, this subgroup score only 13% importance of improvement. iii) narrow-mindedness and provincialism of outgoing students, perhaps also affected by prejudices. iv) too many efforts taken in other directions, e.g. to adapt to new situations. On the other end, a possible interpretation for the high score of this competence among incoming students might lie in the persisting romantic myth of "traveling to Italy is beautiful".

The achievements in the competence we just discussed may be compared to the achievements in the already mentioned *appreciation of diversity and multiculturalit*y (21.1% absolute $\mathbf{I}_{\text{score}}$ value in the OUT sample and 24.3% in the IN one). Indeed, this competence shows only –2.5% difference between outgoing and incoming students. This might be an interesting fact in itself. Nevertheless, this result is the combined result of many country subgroups, each one behaving rather differently. Among outgoing students this competence finds relevant importance of improvement in students going to TR (39%, a reasonable result!), followed by those going to CH, BE and SE (32.4%, 31.5% and 30.9% respectively). The less affected subgroups are those going to CZ (only 10% importance of improvement), SF and DK (17%), PL (20%). Among

[12] T.I.M.E. — Top Industrial Managers for Europe, a quality engineering network since 1989, see https://www.time-association.org/

incoming students those perceiving significant improvement are BE, GR and FR students (58%, 40% and 39% respectively); surprisingly the UK students declare only 21% importance of improvement (this is the lowest value found; however, this should be compared with the value 62% in the previously discussed competence). This may hint that UK students already experience a challenging multicultural environment at home. We shall further discuss below these two competences in Section IV.1.

Table 6 shows that the competence *interpersonal skills* shows a –7.8% difference, being the second, though not as marked as the first, largest negative difference between the OUT and IN samples (absolute $\mathbf{I}_{score}$ values are 21.7% and 29.5% respectively). This seems to indicate that Italian daily environment (university life included) helps in developing interpersonal relationships and communication skills. Students from DE and PT, while in Padova, perceive for this competence an importance of improvement as high as 51% and 38% respectively, i.e. values quite higher than the value yielded by the entire incoming sample. As to outgoing students, they perceive an importance of improvement for this competence, which is very similar for students visiting ES, DE and FR (equal or slightly larger than the value found for the whole outgoing sample). The $\mathbf{I}_{score}$ value raises for those visiting the UK (26%), BE (32%) and NO (39%), but in DK, NL, SE and SF it is below the value pertaining to the whole outgoing sample.

IV. **Country effects in more detail**

The two main samples can be divided into their country subgroups by splitting according to the visited country (outgoing sample) or according to the home country (incoming sample). Table 9a and 9b show relevant details. We consider only those countries, which involve at least 14 students. In this manner, the resulting country subgroups cover respectively the 95% and the 87% of the entire outgoing and incoming samples. Ranked in terms of the numbers of students, the most visited countries are ES, DE, FR, UK, PT and BE and the countries which sent most students to Padova are ES, DE, UK, FR, PL and PT.

We describe a number of interesting cases below, which show the richness of facts and possible interpretations related to country effects; however, further investigation is needed to confirm some conclusions. Moreover, the reader should be aware that for some country subgroups the given percentage importance relies on a small number of students. Thus random fluctuations in the results may very well occur. In some cases, this fact might weaken our interpretations.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Table 9a

General data of the country sub-samples for OUT students. These countries cover 95% of the whole responding OUT sample (we use the same country abbreviations as those used in the web)

Visited country	ES	PT	TR	CH	CZ	AT	BE	DK	NL	NO	SE	SF	UK	PL	DE	FR
Number of respondents	227	67	14	22	20	31	49	24	37	18	20	37	83	26	146	119
Erasmus students per country	266	78	16	23	26	37	63	30	43	22	24	44	100	33	164	139
Answering rate per visited country	85%	86%	88%	96%	77%	84%	78%	80%	86%	82%	83%	84%	83%	79%	89%	86%
Number of ticks	1093	318	65	108	96	151	238	116	176	90	97	179	408	128	708	579

Table 9b

General data of the country sub-samples for IN students. These countries cover 87% of the whole responding IN sample (we use the same country abbreviations as those used in the web)

Home university country	AT	BE	DE	ES	FR	GR	HR	PL	PT	RO	UK
Number of respondents	16	24	107	178	34	18	14	40	31	23	32
Erasmus students per country	17	30	119	202	37	18	16	42	36	25	46
Answering rate per visited country	94%	80%	90%	88%	92%	100%	88%	95%	86%	92%	70%
Number of ticks	76	104	475	770	154	75	57	183	130	87	145

Tuning Journal for Higher Education

ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

We can look at the importance of improvement perceived by the country subgroups during their mobility experience from different points of view, i.e.:

- Focusing on a given competence in order to detect differences in their improvement linked to the home country (incoming students) or to the guest country (outgoing students). In some cases, this was already described above.
- Looking at a given country subgroup, either outgoing or incoming, in order to see which competences have resulted in the largest importance of improvement for its students.
- Looking at the exchange of competences which occurs between students, belonging to a given pair of countries, i.e. between the subgroups "students outgoing to a given country" and "students incoming from that same country". We shall refer to them as "paired" country subgroups.

IV.1. *From the point of view of a given competence*

We consider *knowledge of a second language*, which is ranked high for both OUT and IN students as an example of this first point of view. We note that the difference in $\mathbf{I}_{score}$ between the OUT and IN samples is relatively small (i.e. 7%) compared to their actual values (68,2% and 61,3% respectively). In general terms, outgoing students seem to benefit a bit more from the mobility experience, thus showing that Padova students are in general less equipped with foreign language capabilities. However, country effects tell something more. As detailed below in Table 10a and 10b, many country subgroups perceive an $\mathbf{I}_{score}$ regarding *knowledge of a second language,* which is higher than 70%. Among outgoing students, those going to CH (mostly to French speaking universities) perceive an $\mathbf{I}_{score}$ value which is 20% (!) higher than the value yielded by the entire outgoing sample. This might show that the French language preparation was limited and that the improvement was quite substantial. Students going to CZ, NL, TR, SE perceive an $\mathbf{I}_{score}$ value, which is 11 to 9% higher than the one perceived by the entire outgoing sample; here it is not clear whether they refer to the language of that country (which is most probably the case) or to English as *lingua franca*. Students going to FR and DE perceive an $\mathbf{I}_{score}$ close to (a bit lower than) the one perceived by the entire OUT sample. Finally, the students going to UK also perceive an $\mathbf{I}_{score}$ value which is 8% lower than the value perceived by the entire OUT sample, and score the minimum value among

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

large country subgroups; this is a clear hint to the fact that the language preparation was already good at arrival time and thus "not much" improvement was needed. Among incoming students, the second language is Italian without any doubt. The largest improvement is perceived by AT students (92% importance of improvement), followed by GR, PL, BE and DE students with respectively 80%, 74%, 72% and 67%. Latin countries range from 50% (PT students) to 62% (ES students) with RO and FR students at 57% and 58% respectively. UK students perceive an $\mathbf{I}_{score}$ value equal to 59%, i.e. slightly below the value yielded by the entire incoming sample. This fact might hint at either the fact that their preparation was already reasonable at arrival[13] or that they did not find it useful to learn the Italian language well, since English is a kind of lingua franca among European young people.

Tables 10a and 10b, regarding outgoing and incoming students respectively, summarize for each competences those country subgroups, which show the largest improvement. The tables also give, for reference purposes, the $\mathbf{I}_{score}$ of each competence for the entire corresponding sample, (i.e. OUT or IN sample).

Table 10a

Importance of improvement for all outgoing students and for best improving country subgroups

Tuning competence	OUT importance (all OUT)	Outgoing country groups experiencing major impact
Capacity to adapt to new situations	69,2%	PL (94%), DK (82%), CH & UK (74%), CZ & AT (73%)
Knowledge of a second language	68,2%	CH (88%), CZ (78%), SE& TR & NL (77%)
Problem solving	31,0%	TR (46%), SF (42%), NL (40%)
Oral and written communication	28,6%	SE (36%), PT (35%), UK (33%)
Appreciation of diversity and multiculturality	27,2%	TR (38%), CH & BE (32%)
Understanding of cultures and customs of other countries	25,9%	SF & SE (32%), TR (31%)
Capacity for organization and planning	24,7%	NO (39%), BE (38%), AT (36%)
Interpersonal skills	21,7%	NO (39%), BE (32%)
Decision-making	21,1%	NO (33%), SE (31%), PL(27%)
Ability to work in an international context	21,1%	CH (42%), DK (30%)
Capacity for applying knowledge in practice	20,8%	BE (36%), NO (33%), CZ & NL (26%)

[13] In the author's experience as Erasmus coordinator, it happened to see UK students giving up their stay in Italy, because they were not successful at the examination in Italian language at their own university

Tuning competence	OUT importance (all OUT)	Outgoing country groups experiencing major impact
Critical and self-critical abilities	17,2%	NO (28%), UK 27%), PL (23%)
Teamwork	14,7%	DK (26%), CZ (21%), PL (20%)
Research skills	14,6%	PL (27%), AT (26%), NL (23%), SF (22%)
Information management skills	12,7%	TR (23%),DK (17%), many countries (16%)
Capacity for generating new ideas (creativity)	10,1%	TR (23%), CZ (16%)
Ability to work autonomously	9,6%	NO (39%), TR (23%), CH (14%)
Will to succeed	9,3%	CZ (21%), TR (15%), DK & AT (13%)
Capacity to learn	8,6%	AT (17%), FR & BE (13%)
Basic general knowledge	6,9%	SE (15%), NO (11%)
Concern for quality	6,4%	FR (13%), BE (11%)
Grounding in basic knowledge of the profession	5,1%	SE (15%), UK (9%)
Ability to work in an interdisciplinary team	5,1%	DK (13%), PL (12%), BE (11%)
Capacity for analysis and synthesis	4,7%	NO (11%), CZ (10%)
Initiative and entrepreneurial spirit	4,1%	CH & DK (9%)
Leadership	3,4%	DK (26%), many countries (0%)
Project design and management	2,8%	DK (13%), CZ (10%), many countries (0%)
Ethical commitment	2,5%	CZ (16%), CH (9%), SF (6%)
Ability to communicate with not experts	1,6%	DK (9%), TR (8%), many countries (0%)
Elementary computing skills	0,9%	NO (6%), CH (5%), many countries (0%)

Table 10b

Importance of improvement for all incoming students and for best improving country subgroups

Tuning competence	IN importance (all IN)	Incoming country groups experimenting major impact
Knowledge of a second language	61,3%	AT (92%), GR (80%), PL 74 %), BE (72%)
Capacity to adapt to new situations	45,5%	RO (69%), HR (61%), FR (55%), ES (49%)
Understanding of cultures and customs of other countries	44,5%	AT (72%), UK (62%), HR (61%), DE (55%)
Oral and written communication	35,1%	HR (79%), BE & UK (48%), AT (46%), PL (41%)
Problem solving	34,3%	PT (50%), ES & RO & GR (40%)
Appreciation of diversity and multiculturality	29,7%	BE (58%), GR (40%), AT & FR (39%)
Interpersonal skills	29,5%	DE (51%), PT (38%), PL (33%)

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Tuning competence	IN importance (all IN)	Incoming country groups experimenting major impact
Decision-making	24,9%	FR (36%), PT (35%), RO (34%), ES (31%)
Ability to work in an international context	24,3%	UK & PL (41%), RO (40%), AT (39%), PT (38%)
Capacity for organization and planning	16,8%	GR (33%), AT (26%), DE (20%)
Basic general knowledge	14,5%	AT (20%), RO (17%)
Capacity to learn	14,3%	UK (21%), ES & BE (19%)
Ability to work autonomously	11,4%	BE (29%), UK (24%), HR (18%), FR (16%)
Capacity for analysis and synthesis	10,8%	RO (23%), ES (16%), BE (14%), FR (13%)
Research skills	10,6%	GR (27%), PT (23%), UK (21%), AT (20%)
Critical and self-critical abilities	10,4%	GR (20%), RO (17%)
Capacity for applying knowledge in practice	10,0%	UK (14%), AT & GR (13%)
Teamwork	9,2%	PL (19%)
Initiative and entrepreneurial spirit	8,9%	ES (23%), PT (12 %), many countries (0%)
Ability to communicate with not experts	8,5%	DE & RO (11%), BE & UK % FR (10%)
Will to succeed	8,5%	UK (21%), FR (19%)
Capacity for generating new ideas (creativity)	8,1%	HR (26%), GR (20%), BE (14%)
Grounding in basic knowledge of the profession	4,6%	ES (6%), many countries (0%)
Information management skills	4,2%	PT (8%), GR & AT (7%)
Ethical commitment	4,0%	PT (8%), DE & GR (7%)
Leadership	3,7%	RO (6%), BE (5%), many countries (0%)
Concern for quality	3,7%	AT (13%), UK (10%), many countries (0%)
Ability to work in an interdisciplinary team	3,3%	RO (6%), DE (5%), many countries (0%)
Project design and management	3,1%	GR (7%), many countries (0%)
Elementary computing skills	2,7%	HR (9%), GR (7%), RO (6%), many countries (0%)

A general finding is that practically all listed competences have some country subgroups, which perceive values, for their importance of improvement, higher or even much higher than the value of the corresponding main sample (either OUT or IN). In other words, we see relevant fluctuations in the perceived importance among the several country subgroups. In some cases competences with a low $\mathbf{I}_{score}$ in the entire main sample (either OUT or IN) receive an appreciable number of ticks in some of their country subgroups. These, sometimes strong, fluctuations may be related to a number of factors, linked to both the academic and the ordinary life environments experienced by the given subgroup. In this way, a diversified and rich set of possible interpretations can be assembled. To illustrate this point, we list some stimulating examples starting with outgoing students.

Outgoing subgroups

For each listed competence, between parentheses we give the $\mathbf{I}_{score}$ value for the importance of improvement perceived by the entire outgoing sample:[14]

- *Problem solving* ($\mathbf{I}_{score}$ = 34.3% for the entire OUT sample): the most improving student subgroups are those going to countries with "difficult" languages;
- *Understanding of cultures and customs of other countries* (25,9%): the most improving subgroups are those going to Scandinavian countries (where SF and SE are perceived as really challenging, but still score an importance value lower than the one achieved by the entire incoming sample, see below) and to TR. The decoupling which occurs between the improvement of this competence and the one regarding *appreciation of diversity and multiculturality* is also of interest. Indeed, while the $\mathbf{I}_{score}$ values for the importance of improvement of these two competences are similar in the entire OUT sample (25.9% and 27.2% respectively), some country subgroups show quite different values in their corresponding $\mathbf{I}_{score}$ values;
- *Ability to work autonomously* (9.6%): students going to NO and TR perceive quite a large importance of improvement (39% and 23%). The case of this NO subgroup shows the largest positive difference with respect to the $\mathbf{I}_{score}$ value for the entire IN sample among all possible subgroups. These high importance values may be related to students, who for some reasons had to work alone (e.g. information retrieval at a computer, which in this NO subgroup is 9% above the overall value!); thesis work should be excluded since the improvement in *research skills* is quite below its overall value for these subgroups.
- *Grounding in basic knowledge of the profession* (5.1%): students going to SE perceive a 15% importance of improvement and those going to UK a 9% importance. The SE-going students are a highly selected subgroup mostly visiting *Kungliga Tekniska Högskolan* (Royal Institute of Technology) within the already quoted T.I.M.E. network. The UK data are most probably linked to the pragmatic UK academic environment, quite open to the job market needs. It is also worth noting that many subgroups perceive $\mathbf{I}_{score}$= 0% for this competence.

[14] In this and in the following lists of competences, we specify for each competence between parentheses its $\mathbf{I}_{score}$ value for the main sample under consideration (either OUT or IN sample), repeating its full explanation only in the first item of each list.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

- *Leadership* (3.4%): students going to DK perceive a 26% importance of improvement (many other country subgroups perceive $\mathbf{I}_{score} = 0\%$!). The DK-going students are again a highly selected subgroup mostly visiting *Danmarks Tekniske Universitet* (DTU in Lingby), within the already quoted T.I.M.E. network.
- *Project design and management* (2.8%): again students going to DK perceive 13% improvement importance (and many other country subgroups perceive 0% !).
- *Ethical commitment* (2.5%): students going to CZ perceive 16% importance of improvement and those going to CH a 9% importance. As to students going to CZ, this somewhat unusual result can be traced to 3 students visiting Charles University in the life sciences area. However, these numbers are really too small, to be conclusive!

Incoming subgroups

For each listed competence, between parentheses we give the $\mathbf{I}_{score}$ value for the importance of improvement perceived by the entire incoming sample:

- *Problem solving* ($\mathbf{I}_{score} = 34.3\%$ for the entire IN sample): most improving students subgroups are those coming from southern countries.
- *Understanding of cultures and customs of other countries (*44.5%*)*: a significant aspect is that the largest increase occurs in the DE and UK subgroups. Moreover, as compared to outgoing students, the improvement of this competence is perceived as more important than the improvement in *appreciation of diversity and multiculturality* (25,9%, see below). Again, such an enhanced importance is quite pronounced in larger country subgroups (UK and DE incoming students show respectively an enhancement (i.e. difference between the two corresponding $\mathbf{I}_{score}$ values) equal to 41.4% and 23.2%; ES students show a 13% enhancement, while FR students only 3.2%). Such facts confirm that these two competences are really unrelated in the students' perception. A possible interpretation is that students incoming to Padova find a really welcoming and receptive environment (e.g. through the activities of the local branch of Erasmus Student Network or thanks to the integration efforts of the University Language Centre), which helps them to enter the Italian way of life and culture (customs). On the other hand, these data seem to show that these same students

have a home environment rich in diversity and multiculturality. By further looking at the data for *understanding of cultures and customs of other countries*, we can find some finer country effects, probably linked to local situations. [15]

- *Appreciation of diversity and multiculturality* (25,9%): most improving subgroups are those coming from AT, UK, HR and DE; this result is further highlighted below in terms of a comparison between Northern and Southern incoming students.
- *Will to succeed* (8.5%): UK and FR students indicate respectively 21% and 19% importance of improvement, covering about one fourth of the students who select this competence. Half of the students "*willing to succeed*" belong to humanities and economics and one fourth to political sciences and psychology. This may indicate a competitive environment found by these students in Padova.
- *Ethical commitment* (4%) shows small oscillations, between 0 and 7% (PT, DE and GR students, respectively at 7.7%, 7.4% and 6.7%). It is interesting to note that 29% of the students who select this competence as an important one are from the area of economics.
- *Concern for quality* (3.7%) shows larger oscillations in importance: four cases of no ticks are counterbalanced by 13% of the AT subgroup and 10% of the UK students.

IV.2. *From the point of view of a given country subgroup*

Outgoing students

The profile of the outgoing country subgroups, in terms both of most improved competences and of actual values for importance of improvement, can be quite different from the one pertaining to the entire outgoing sample. Two aspects are relevant here. The largest country subgroups, ES and DE, show small deviations from the entire OUT sample profile. Quite different profiles pertain to smaller country subgroups. We already remarked on the peculiarity of

[15] As an example, RO guest students declare an importance of improvement as low as 11%, this low percentage being possibly related to a large Romanian community living in Padova, which may then act as a cultural mediator. A further example is offered by BE students, who declare 38%, i.e. quite below the $\mathbf{I}_{score}$ value of the Northern grouping, this fact being possibly linked to the existence of a strong Italian immigration in Belgium in the middle of last century. And so on.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

the subgroups outgoing to DK and SE. Table 11a, which complements Table 10a, confirms such aspects by listing for several country subgroups the number of competences, for which the importance of improvement achieved is either the first or a second maximum value. Scandinavian countries (SE, SF, NO, DK) collect 17 out of 30 absolute maxima, but if we consider the merged "Scandinavian sample", the importance of improvement values are usually quite close to the values for the entire sample.

Table 11a

Outgoing students' country subgroups: number of competences for which maximum and second maximum improvement occurred

Country	ES	PT	TR	CH	CZ	AT	BE	DK	NL	NO	SE	SF	UK	PL	DE	FR
Number of Max	0	0	3	3	2	1	1	5	0	8	3	1	0	2	0	1
Number of 2nd Max	0	1	3	2	5	1	3	4	0	2	2	2	2	1	1	1
Sum	0	1	6	5	7	2	4	9	0	10	5	3	2	3	1	2

Some further comments are devoted to those competences, which are affected by mobility in a limited way, but which, nevertheless, show clear country effects:

- Competence *will to succeed* ($\mathbf{I}_{score}$ = 9.3% for the entire OUT sample): students visiting CZ and TR indicate respectively 21% and 15% importance of improvement; students going to ES, AT, DK, SF and UK perceive an importance (between 11% and 13%), which is higher than the whole sample value.
- Competence *ethical commitment* (2.5%) shows large oscillations, between 0 and 16%. Students going to CZ perceive a 16% importance of improvement, which exceeds that of students going to CH (9%) and all the others. It seems like in CZ as well as in CH (to a lesser extent, though) ethical issues are embedded in ordinary/academic life more deeply than elsewhere.

Incoming students

Among incoming students, some country subgroups show a profile of the perceived importance of improvement among the 30 competences, which is

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

rather different from the one of the entire sample. UK students offer a clear example. They rank first *understanding of cultures and customs of other countries* ($\mathbf{I}_{score}$ = 62%), followed by *knowledge of a second language* (59%), *oral and written communication* (48%) and by *capacity to adapt to new situations* and *ability to work in an international context* (both at 41%, but respectively below and quite above the value for the whole sample!). The perceived improvement in *ability to work autonomously* (24%, the second highest — after BE students — among all country subgroups!) is worth a particular comment. It may be related to the fact[16] that the study progression in UK universities is often accompanied by the institution (e.g. through advising tutors) and not left to the student's personal initiative, as it is the case — for example — in Italy. A complementary confirmation to this comment is in the importance of improvement for *ability to work autonomously* perceived by the whole outgoing sample (only 9.6%) and, within it, by the subgroup of Padova students going to UK (7.4%, see also below). When compared to all other country subgroups, UK students coming to Padova show a maximum of importance of improvement in four competences (*capacity for applying knowledge in practice*, *capacity to learn*, *ability to work in an international context*, *will to succeed*). Furthermore, they show a second maximum in five competences (*oral and written communication*, *teamwork*, *understanding of cultures and customs of other countries*, *ability to work autonomously*, *concern for quality*). Such a rewarding profile is not common among the country subgroups; see synthetic details in Table 11b, which complements Tables 10b from the point of view of the home country.

Table 11b

Incoming students' country subgroups: number of competences for which maximum and second maximum improvement occurred

COUNTRY	ES	GR	PT	RO	AT	BE	UK	PL	DE	FR	HR
Number of Max	2	4	3	5	4	2	4	1	1	1	3
Number of 2nd Max	3	6	4	2	1	2	5	1	3	2	1
Sum	5	10	7	7	5	4	9	2	4	3	4

We further comment here on the profiles of larger subgroups. ES students show a competence maximum for *initiative and entrepreneurial spirit* ($\mathbf{I}_{score}$ =

[16] Known by the author through his experience in Erasmus exchanges with UK universities.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

23.4% against *8.9%* for the entire incoming sample) as well as for *grounding in basic knowledge of the profession* (which, however, is among the less affected competences in the entire sample). Moreover, they show a second maxima for *capacity for analysis and synthesis, problem solving* and *project design and management* (this latter being again a less affected competence). DE students show a maximum for *interpersonal skills* ($\mathbf{I}_{score}$ = 51%, well above the whole IN sample value), FR students for *decision-making* (36%). This latter value is very similar in almost all Southern country subgroups (ES, PT and RO, but not GR), while among Northern countries UK students perceive only 14% importance of improvement (the lowest value for this competence) and DE and PL students in their turn perceive 19%, quite below the value for the whole sample of incoming students ($\mathbf{I}_{score}$ = 25%).

A further, and quite revealing, comparison is the one between Northern and Southern groups of students, made respectively of students from AT, BE, UK, PL, DE and FR (253 students, as a whole) and from ES, GR, PT, HR and RO (264 students). Indeed, in Table 12 we show the gap in the perceived importance of improvement for those competences, which show the largest gap between Southern and Northern country groups. All other competences have a gap smaller than 5%.

Table 12

Competences which are most improved either in the Southern or in the Northern incoming groups. Southern group includes ES, GR, PT, HR and RO (264 students), Northern group includes AT, BE, UK, PL, DE and FR (253 students)

Competence	Gap	Southern	Northern	All incoming
Capacity for analysis and synthesis	8,6%	14,8%	6,2%	10,8%
Capacity To Adapt To New Situations	6,7%	49,3%	42,7%	45,5%
Problem solving	6,7%	40,6%	33,9%	34,3%
Decision-making	8,3%	29,0%	20,7%	24,9%
Initiative and entrepreneurial spirit	15,8%	17,6%	1,7%	8,9%
Oral and written communication	-9,9%	30,5%	40,4%	35,1%
Knowledge of a second language	-6,9%	61,2%	68,1%	61,3%
Interpersonal skills	-9,1%	26,2%	35,3%	29,5%
Appreciation of diversity and multiculturality	-9,8%	24,6%	34,4%	29,7%
Ability to work in an international context	-9,4%	19,1%	28,5%	24,3%
Understanding of cultures and customs of other countries	-17,6%	35,1%	52,7%	44,5%

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

The gap for *capacity to adapt to new situations* and for *problem solving* as well as the gap for *knowledge of a second language* is not very relevant if compared to the actual importance value for all incoming students. For the other eight competences shown in Table 12 the gap is one third or more than the importance value for all incoming students. As a general comment, we can say that Southern students, when compared to the Northern colleagues, during their stay in Padova mostly improve competences related to their own growth, while the improvement perceived by the Northern students with respect to the southern colleagues mostly focuses on communication, interpersonal skills and understanding of other and diverse cultures. We underline here the case of *capacity for analysis and synthesis,* which seems to reveal an environment in Padova, which is quite apt to develop that competence for Latin students. This is reinforced[17] by the fact that also FR students (nominally in the Northern group, but from a Latin country) perceive an importance of improvement equal to 13%. We also underline the case of *initiative and entrepreneurial spirit* with a gap, which is much higher than the actual importance value for all incoming students and which is almost exclusively due the ES and PT subgroups of students. These latter belong to several subject areas, with a bias on health subjects.

Some other comments regard competences showing a very little gap between Northern and Southern country groups:

- *Research skills* is the only competence showing an appreciable importance of improvement ($\mathbf{I}_{score}$ = 10.6% for the whole incoming sample), but showing no gap between Southern and Northern students (0.3% only). This is probably due to the fact that the students who perceive improvement in this competence carry out thesis/project work in Padova, this being their first experience in a research environment.
- *Ability to work in an interdisciplinary team* shows an almost vanishing gap (0,03%), but it has quite a low overall importance (3.3%): it may simply detect the fact that students incoming to Padova are rarely involved in interdisciplinary educational activities.

A final comment regards a competence which is affected by mobility in a limited way in the whole sample, but which show clear Northern-Southern country effects: *Elementary computing skills* is truly the less ticked competence (2.7% importance of improvement for all incoming students). It

[17] A similar reinforcement occurs for *decision-making* where FR students perceive an importance of improvement (36%) quite similar to ES, PT and RO students (31%, 35% and 34%).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

collects 5 cases of country subgroups showing no ticks, all of them included in the Northern countries; among these latter only DE students declare a small importance (1%). The Southern students on the contrary perceive a 5% of importance for the development of these skills in Padova. This confirms previous early findings[18] about digital development in the two sets of countries, even though in the present context it witnesses a rather small gap and it is "measured" with respect to the *level* of development found in Padova.

IV.3. *Exchange and Complementariness of competence improvement*

Another fruitful comparison is between Padova students, outgoing to a given country, and incoming students from that same country. This comparison should reveal the possible complementariness of the two environments, i.e. those related to ordinary and academic life, as experienced by the two "paired" country subgroups. In other words, the same students in different academic and daily life environments develop and/or improve different generic competences; we can say that the students of the "pair" exchange among themselves improved abilities. Erasmus mobility triggers and at the same time reveals the complementariness of competence improvement. We explored these aspects relying on five pairs of country subgroups, i.e. respectively between Padova students outgoing to DE, ES, FR, PL and UK on one side and DE, ES, FR, PL and UK students incoming to Padova on the other side. These pairs enjoy a better statistical base in the present survey.

For each pair we show below — Table 13a, b — which competences are most enhanced in the Padova students, while they stay in the paired country universities, and which ones are most enhanced in the corresponding foreign student colleagues, when they are hosted at Padova University.

In more detail, we see that the improvement of some competences is common to several pairs: the Padova students improve *capacity to adapt to new situations* with respect to the colleague students in a given pair (in all pairs, except the FR related pair!). Moreover, they improve even more *capacity for organization and planning* and *information management skills* (except the ones in the ES pair). On the other end guest students in Padova

[18] An early report from the European Commission about Erasmus exchanges, in the '90s, showed how the Southern students going to Northern countries much benefitted by the computer facilities available there. The reverse was not occurring.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

improve *understanding of cultures and customs of other countries* (again except those in the ES pair).

An interesting aspect is that Padova students markedly improve *critical and self-critical abilities* with respect to colleague students in the three Northern pairs (UK, PL, DE), this being most probably linked to the teaching / learning environment. On the other end, UK [and ES] students in Padova perceive a better improvement in *capacity to learn*. Here the analytical, in depth approach of the traditional Italian academic environment may well play its role.

Some "exchanged" competences appear in a smaller number of pairs. As a first example, take the ES and FR pairs: Padova students in those countries develop a better *capacity for applying knowledge in practice* with respect to the paired country subgroups in Padova, and vice-versa the FR and ES students in Padova declare a definitely better improvement in *capacity for analysis and synthesis*. This shows again a complementariness of approaches in teaching learning activities. In these same pairs, the enhancement of *decision-making*, experienced by guest students in Padova, appears as a surprising feature. As a second example, Padova students in PL and DE show a marked improvement in *research skills*, most probably because they get involved in thesis work, for which English language is the lingua franca, thus minimizing the effects of not knowing either PL or DE language.

Finally, some competences appear only once, thus revealing singular situations. Not pretending to be exhaustive, we mention here:

FR is the only country — among the above five — where a meaningful difference between the Padova students and the incoming paired subgroup appears in *knowledge of a second language*, i.e. staying in FR really helps this competence. The opposite situation occurs for PL students in Padova, who really benefit from the stay for learning Italian language, as compared to the Padova colleagues in PL (who should learn Polish!).

Padova students in FR benefit in improving *concern for quality* and *capacity for generating new ideas (creativity)*, two competences not found in the other pairs.

Padova students in UK benefit in improving *basic general knowledge*, this being consistent with the synthetic and pragmatic teaching learning approach of UK universities.

ES students in Padova experience a great improvement in *initiative and entrepreneurial spirit*, a surprise in itself. If we remember the similar — but to a much lower extent — finding, related to all the Southern incoming students (Table 12), we can further confirm that the academic and daily life environments found in Padova are able to trigger quite an improvement of that competence in these subgroups of students.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Table 13a

Competence "exchange" between pairs of outgoing and incoming students related to ES and FR respectively. *Each pair shows the OUT importance (i.e.* I_{score} *for the sample of all outgoing students, first column) for the listed competence (second column) as well as the difference between OUT and IN importance (between* I_{score} *of the paired subgroups, third column, rounded values)*

OUT importance (all OUT)	ES enhances...	OUT - IN subgroups' importance difference
69,2%	Capacity to adapt to new situations	21%
14,7%	Teamwork	9%
21,1%	Ability to work in an international context	9%
14,6%	Research skills	9%
9,3%	Will to succeed	7%
20,8%	Capacity for applying knowledge in practice	7%
Padova on ES students enhances …		
4,1%	Initiative and entrepreneurial spirit	-18%
4,7%	Capacity for analysis and synthesis	-11%
31,0%	Problem solving	-10%
6,9%	Basic general knowledge	-10%
8,6%	Capacity to learn	-10%
21,1%	Decision-making	-9%

OUT importance (all OUT)	FR enhances...	OUT - IN subgroups' importance difference
24,7%	Capacity for organization and planning	16%
20,8%	Capacity for applying knowledge in practice	15%
12,7%	Information management skills	10%
6,4%	Concern for quality	10%
10,1%	Capacity for generating new ideas (creativity)	10%
68,2%	Knowledge of a second language	9%
Padova on FR students enhances …		
25,9%	Understanding of cultures and customs of other countries	-20%
21,1%	Decision-making	-16%
27,2%	Appreciation of diversity and multiculturality	-15%
9,3%	Will to succeed	-13%
1,6%	Ability to communicate with not experts	-7%
4,7%	Capacity for analysis and synthesis	-7%

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Table 13b

Competence "exchange" between pairs of outgoing and incoming students related to PL, DE and UK respectively. *Each pair shows the OUT importance (i.e.* I_{score} *for the sample of all outgoing students, first column) for the listed competence (second column) as well as the difference between OUT and IN importance (between* I_{score} *of the paired subgroups, third column, rounded values)*

OUT importance (all OUT)	PL enhances...	OUT - IN subgroups' importance difference
69,2%	Capacity to adapt to new situations	55%
17,2%	Critical and self-critical abilities	15%
24,7%	Capacity for organization and planning	13%
14,6%	Research skills	11%
12,7%	Information management skills	10%
5,1%	Ability to work in an interdisciplinary team	9%
	Padova on PL students enhances…	
25,9%	Understanding of cultures and customs of other countries	-26%
28,6%	Oral and written communication	-18%
21,1%	Ability to work in an international context	-18%
68,2%	Knowledge of a second language	-15%
21,7%	Interpersonal skills	-13%
27,2%	Appreciation of diversity and multiculturality	-13%
6,9%	Basic general knowledge	-11%

OUT importance (all OUT)	DE enhances...	OUT - IN subgroups' importance difference
69,2%	Capacity to adapt to new situations	23%
12,7%	Information management skills	11%
17,2%	Critical and self-critical abilities	9%
14,6%	Research skills	9%
24,7%	Capcity for organization and planning	7%
14,7%	Teamwork	7%
	Padova on DE students enhances…	
25,9%	Understanding of cultures and customs of other countries	-31%
21,7%	Interpersonal skills	-28%
1,6%	Ability to communicate with experts in other fields	-9%
6,9%	Basic general knowledge	-7%
2,5%	Ethical commitment	-7%
28,6%	Oral and written communication	-6%

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

OUT importance (all OUT)	UK enhances...	OUT - IN subgroups' importance difference
69,2%	Capacity to adapt to new situations	32%
17,2%	Critical and self-critical abilities	20%
12,7%	Information management skills	12%
24,7%	Capacity for organization and planning	11%
6,9%	Basic general knowledge	9%
27,2%	Appreciation of diversity and multiculturality	9%
Padova on UK students enhances…		
25,9%	Understanding of cultures and customs of other countries	-38%
21,1%	Ability to work in an international context	-23%
9,6%	Ability to work autonomously	-17%
28,6%	Oral and written communication	-15%
8,6%	Capacity to learn	-12%
1,6%	Ability to communicate with not experts	-10%
9,3%	Will to succeed	-10%

Finally, the UK students in Padova perceive a significantly better improvement in *ability to work autonomously* than their Padova colleagues in UK, thus confirming a remark about who/what governs the study progression, as detailed in section IV.2 above.

V. **Discussion and conclusions**

In this paper, we explored the *perceived* impact of the Erasmus mobility experience on the improvement of the thirty generic competences, which were identified by the Tuning Europe project. The tool through which the students gave their answers is a list of short names, each one standing for a given competence. This was the pragmatic choice of Tuning Europe participants.[19] We iterate it here, even though with a less refined data processing. Of course, the return given by each student depends on how each short name resonates in her/his mind and experience and depends in addition on her/his self-awareness about the role of generic competences in present

[19] See González and Wagenaar, eds., *Tuning Europe, Final Report — Phase 1,* 31-32; and González and Wagenaar, eds., *Tuning Europe, Universities' Contribution to the Bologna Process,* 72-73.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

and future life. The relation between what is evoked in the responding person by the short name of a given competence and the actual dimensions of that same competence in the brain and life of that person should deserve some further attention by the specialists in competence-based learning. The students' returns generate databases, which for each student indicate as a rule five chosen competences, i.e. the ones, which were most improved during her/his Erasmus stay. We then introduce a quantity $\mathbf{I}_{score}$, which we name "perceived *importance of improvement*". For a given competence $\mathbf{I}_{score}$ closely reflects the percentage of ticks, which that given competence received by the responding sample/subsample. At the same time, such a quantity allows direct and consistent comparisons among different samples and subsamples (see Appendix I for technical details regarding its definition).

A second methodological remark concerns the statistics of the samples and subsamples considered here. The two main samples (outgoing and incoming students) should be quite reliable. As to the country subgroups, we decided to include those totaling at least 14 answering students, a number which implies on the average about 70 ticks per competence. Indeed, the least ticked competences receive 45 ticks and 70 ticks, in the outgoing and incoming samples respectively. Most competences get more (or much more) than 100 ticks. As already remarked above, some random fluctuations in the results may very well occur. In some cases, this fact might weaken our interpretations. Nevertheless, the overall resulting picture is consistent in itself and with other findings. In this same context, while we are aware of our weaknesses, we stress the value of this kind of surveys in highlighting qualitative features in the Erasmus student experience.

The main general result is that the two rankings of importance of improvement are quite similar in qualitative terms for the two main samples (outgoing and incoming students), but that they show significant differences in the importance values, as actually perceived by responding students. Thus, we avoid the average ranking, which can nevertheless be calculated straightforwardly. Both samples assign the first two places to *capacity to adapt to new situations* and to *knowledge of a second language*, though in a different order and with quite a difference in their importance of improvement values. In three cases, they are identified by two thirds of the samples. The difference in value for *capacity to adapt to new situations* can significantly be interpreted in terms of the family life of the Italian students as compared to most of their foreign colleagues. Moreover, considering only competences with an $\mathbf{I}_{score}$ value for the importance of improvement above 27%,[20] we find three *additional*

[20] An appropriate threshold between higher and lower values of importance of improvement, identified by inspection.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

competences in the outgoing sample (at a much lower value than the first two, less than one third of respondents) and five in the incoming sample (at values a bit higher than the three of the outgoing sample). This further difference suggests that the outgoing students perceive improvement on a wider set of competences, thus spreading their ticks and lowering the importance value of the improved competences. On the other hand, the incoming sample concentrates its ticks on fewer competences, raising their importance values. This situation may be specific to the city and University of Padova life environments, which are equal for all incoming students, against a variety of situations encountered by the outgoing students in the several visited countries. The three additional competences of the outgoing sample are *problem solving*, *oral and written communication* and *appreciation of diversity and multiculturalit*y. They also appear in the five additional competences of the incoming sample. The other two competences of the incoming sample are *understanding of cultures and customs of other countries,* at a quite high value (as high as *capacity to adapt to new situations*!), and *interpersonal skills*.

Some significant information can be extracted from the less valued competences. These latter are described at the end of section II. Note that their quite low importance values are referred to the entire main samples (either OUT or IN) and that they hide significant country effects as described in section IV.2.

Indeed, in this piece of work, an important part is played by the comparisons between the two main samples (Section III) and between/among their several country subgroups (section IV). Such an analysis yields a very rich set of findings as well as — when appropriate — of possible interpretations or explanatory remarks, in the attempt of understanding differences.

The comparison between the two main samples leads to a couple of related observations:

- Firstly, focusing on and revealing the differences in the teaching / learning approach between the Italian (Paduan) academic community and those same communities in the partner countries; clear interpretations seem possible.
- Secondly, focusing on some intercultural skills, which apparently are quite fostered by the Paduan environment, but are not perceived by the Italian students abroad as significantly improved. Several interpretations are possible. Moreover, a related finding is that the improvement in *understanding of cultures and customs of other countries* is clearly decoupled from the improvement in *appreciation of diversity and multiculturalit*y.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

As a final comment to this part of our findings, we would like to recall the conclusions of the recent and already quoted Erasmus Impact Study (EIS).[21] The EIS approach does not distinguish between outgoing and incoming students. Out of the 15 competences examined there, 12 ones, apart from differences in phrasing, coincide with the ones included in the Tuning list. Three competences are new ones: *intercultural competences*, which is assessed as to be the most improved one, *sector-or field-specific skills*, which stands low in the Erasmus students EIS rating and *to feel European — to have Europe-wide perspectives beyond the national horizon — to have a sense of European citizenship,* which again stands low. The interesting aspect is that the group of *intercultural* competences[22] in the EIS survey is rated higher than in the findings of the present work. All the other common competences reflect rather well the order found in our two main samples. The only exception is *problem solving* which goes to the bottom of the EIS rating, most probably because of a rather different phrasing. A second interesting aspect is that the EIS assessment methodology does not yield significant differences in the values of its indicator for competence improvement and, in any case, it offers a kind of macro indicator for *all* Erasmus students. The simple tool used here yields marked differences among the values for the perceived importance of improvement, which lend themselves to interesting interpretations and show the richness of behaviors at a micro level. Moreover, one can calculate its value for any sample or subsamples or set of subsamples.

In the present analysis, the values of the two main samples are the result of returns from students either going to or coming back from several different countries, each one with its own culture, customs and daily style of life. This allows for exploring possible perceived country effects. The corresponding analysis was carried out from three different perspectives, which complement each other and which with their findings confirm the overall coherence and soundness of the approach. Indeed, we analyzed the students' returns from the point of view of:

- A given competence, to explore which country subgroups, either outgoing or incoming, showed the greatest improvement. See Tables 10a and 10b and related comments in Section IV.1.
- A given country, to detect its "profile" in terms of the perceived importance of improvement for the thirty Tuning competences both for

[21] See European Commission, *Erasmus Impact Study,* 108.

[22] i.e. using the EIS phrasing: i) *intercultural competences,* ii) *being able to interact and work with people from other backgrounds and cultures*, iii) *knowledge of the host country's culture, society and economy.*

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

the outgoing subgroup (visited country) and the incoming subgroup (home country). See Section IV.2.

- The exchange of competences which occurs between paired country subgroups (students outgoing to a given country versus students incoming from that same country). See Section IV.3, where it is shown how the Erasmus students' self-assessment described here reveals in both involved countries' complementariness of the opportunity offered by degree courses and units for improvement in or development of generic competences.

As a conclusion, the main finding of this piece of work is that the Erasmus mobility experience markedly improves several generic competences, but that such achievements are unequal and depend strongly on the home and host university environment, defined as including both the academic milieu experienced by the students and the daily life routine of the country. More precisely, the present study demonstrates, on the basis of several findings and particular cases, the following general issues about the process "generic competence development in Erasmus mobility for study":

a) the development of competences is linked to:
   i. the initial environmental conditions;
   ii. the actual experience carried out during mobility;
   iii. the quality/composition of the student group, which undergoes the mobility experience.

b) The development of competences is a highly individual, complex and non-linear process, as discussed elsewhere within the Tuning community.[23] Nevertheless, the simple self-assessment tool used in the present work allows the "measurement" of the development of generic competences in an aggregated sample.

c) Erasmus, a well known jewel in itself, is extraordinarily able to exemplify concretely the motto "*united in diversity*" in terms of improved generic competences. The same experience — the Erasmus exchange mobility — originates different individual and group growth.

[23] See for instance Lokhoff, Jenneke et al., eds. *A Guide to Formulating Degree Programme Profiles* (Bilbao, Groningen and The Hague: Publicaciones de la Universidad de Deusto, 2010.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Bibliography

Bracht, Oliver, Constanze Engel, Kerstin Janson, Albert Over, Harald Schomburg and Ulrich Teichler. *The Professional Value of ERASMUS Mobility*. INCHER — International Centre for Higher Education Research. Kassel: University of Kassel, 2006.

Corriere Università. *Sempre più "mammoni": Italiani fanalino d'Europa*, February 9, 2015. Accessed at http://www.corriereuniv.it/cms/20Ita15/02/giovani-italiani-preferiscono-restare-casa-in-francia-uk-meta/

Directorate General Education and Culture. *Survey into the socio-economic background of Erasmus students*. Brussels: European Commission, 2000.

European Commission. *Erasmus+ Programme guide, valid as 1 January 2014*, at http://ec.europa.eu/programmes/erasmus-plus/discover/guide/2014/documents/erasmus-plus-programme-guide_en.pdf

———. *Erasmus Impact Study, Effects of mobility on the skills and employability of students and the internationalisation of higher education institutions*. Luxembourg: Publications Office of the European Union, 2014. Accessed November 12, 2015, doi: 10.2766/75468.

González, Julia, and Robert Wagenaar, eds. *Tuning Educational Structures in Europe, Final Report, Pilot Project — Phase 1, carried out by over 100 Universities, coordinated by the University of Deusto (Spain) and the University of Groningen (The Netherlands) and supported by the European Commission"*. University of Deusto and University of Groningen, 2003.

———. *Tuning Educational Structures in Europe. Universities' Contribution to the Bologna Process. An Introduction*. 2nd ed. Bilbao: Universidad de Deusto, 2008.

Haselberger, David, Petra Oberhuemer, Eva Perez, Maria Cinque, and Fabio Capasso. *ModES Handbook*: *Mediating Soft Skills at Higher Education Institutions, Guidelines for the design of learning situations supporting soft skills achievement,* 2012. Accessed November 12, 2015. http://www.modesproject.eu/en/the-modes-handbook.aspx.

Lokhoff, Jenneke, Bas Wegewijs, Katja Durkin, Robert Wagenaar, Julia González, Ann Ka therine Isaacs, Luigi F. Donà dalle Rose and Mary Gobbi, eds. *A Guide to Formulating Degree Programme Profiles*. Bilbao, Groningen and The Hague: Publicaciones de la Universidad de Deusto, 2010.

Managing Committee of the EMQT-Erasmus Mobility Quality Tools European Project (2009-2011), eds. "Academic Quality in exchange mobility" in *Outcomes of the EMQT project*, 83-129. Padova: Universities of Bologna, Deusto and Padova, 2012.

Villa Sanchez, Aurelio, and Manuel Poblete Ruiz, eds. *Competence-based learning, A proposal for the assessment of generic competences*. Bilbao: Deusto University Press, 2008.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, November 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Appendix I. How to compare percentage values of the parameter importance of improvement in different samples

As discussed in Section I, a straightforward definition for the parameter *importance of the improvement* of a given competence in a given sample might be the percentage ratio of "number of students who ticked that very competence" over "number of students who answered the question regarding competences".

A related — but somewhat clumsier — way to define the importance of improvement is the number of ticks assigned to a given competence over the "*total number of ticks divided by 5*" (i.e. a kind of average number of ticks per selected competence). We call this related quantity the *renormalized* percentage importance and we indicate it with the symbol $\mathbf{I}_{\text{score.}}$. Indeed, it is simply equal to the percentage ratio, as defined right above, multiplied by an appropriate re-normalization factor. This factor, usually very close to unity, takes into account the fact that the number of ticks per answering student in the OUT and IN samples (or any envisaged subsample of these two main ones) varies, see Table 1 of the main text as an example. The renormalization factor — say f_{sample} — is equal to

$$f_{\text{sample}} = (\textit{number of respondents in the given sample}) / [(\textit{number of their ticks}) / 5],$$

it varies according to the sample considered and for each sample it renormalizes the sum of the importance of improvement over the 30 competences to 500%, i.e. 100% times 5, which should be the number of selected "mostly improved competences" in the end-of-stay questionnaires. Such a renormalization does not influence the order of importance or other meaningful facts described for a single sample in the main text, but is most appropriate when comparing the actual values of importance between the OUT and IN samples. It is also appropriate for comparisons with any chosen subsample (e.g. country subgroups, see main text). For the sake of exemplifying, we give the value of f_{sample} for the two main samples discussed here, i.e. 1.0317 and 1.1464 for the OUTgoing and INcoming sample respectively. These numbers are calculated on the basis of Table 1 data.

Finally, we emphasize that because of the lack of clearness in phrasing the step2 of the competence related question, it was not possible to calculate the importance using the method adopted by Tuning Europe — phase 1.[24]

[24] See Julia González and Robert Wagenaar, eds., *Tuning Educational Structures in Europe, Final Report, Pilot Project — Phase 1, carried out by over 100 Universities,*

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Nevertheless, we did a check on the sub-sample of outgoing students, who answered correctly to step 2 of the question, giving their own ranking of the five selected competences. The order of importance calculated using the Tuning Europe method for such a sub-sample reflects almost exactly the order of importance for the whole sample of outgoing students, based on the simpler percentages of ticks. Indeed, they are exactly the same for the first ten competences, except for *capacity for organization and planning* which shifts from 4th to 7th place, when commuting from the first (Tuning way) ordering to the second one (present piece of work).

About the Author

LUIGI F. DONÀ DALLE ROSE (dona@pd.infn.it) holds a "*laurea in Fisica*" from the University of Padova, Italy (1964). He taught there since 1970 till 2011, being appointed as a professor in Theoretical Physics in 1980. He taught Statistical Mechanics, Solid State Physics, Many Body Theory, Quantum Physics. His research activities cover mainly: band theory of metals, quantum electron gas, heat transients by ultra-short laser pulses, solid-liquid metal interface. Since 1995, he took interest In Physics education. From 1990 until 2015, professor Donà dalle Rose was Delegate and later Consultant of the Rector for European Student Mobility at the University of Padova, being also actively committed at grass-root level in Erasmus exchanges and other European projects, among these latter as a participant in CoRe2 and as coordinator of EMQT-Erasmus Mobility Quality Tools. He was cofounder and member of the Steering Committee of the Socrates TNP-Thematic Network Project for Physics and member of the Coimbra Group Executive Board 2007-2013. He was also a member of the Management Committee of the Tuning project and co-Chair of the Tuning Physics Subject Area Group (2000-2008) in Europe. He was a member and expert of the Italian Team of Bologna experts along its duration (2004-2013).

---

*coordinated by the University of Deusto (Spain) and the University of Groningen (The Netherlands) and supported by the European Commission (*University of Deusto and University of Groningen, 2003), 80-81.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 57-98
doi: 10.18543/tjhe-3(1)-2015pp57-98 • http://www.tuningjournal.org/

Changing paradigms: towards competency-assessment in admission to master's programmes in Europe: a review

Kees Kouwenaar*

doi: 10.18543/tjhe-3(1)-2015pp99-135

Abstract: The majority of efforts to improve admission to master's programmes in Europe for students with a bachelor's from outside the providing university have been focused on standardization of defined outcomes of bachelor's degrees and improvement in mechanisms for recognition of diplomas and degree. With growing diversity within and around these master's programmes, an alternative approach to master's admission is needed. This article analyses the nature and shortcomings of the standardisation and the recognition approach and reports on the creation of a competency-assessment based approach in the Mastermind Europe project. In that project — part of the EU's ERASMUS+ programme — Guiding Tools are produced for academic directors of master's programmes (or 'academic masters directors') who want to base their admission decisions less on recognition of a diploma and more on assessment of the applicants' competency. The Guiding Tools focus on specific categories of admission criteria, on how they can be brought together in a coherent framework and on IT tools to help organize the process. The guiding tools are accompanied by a short Introductory Note on the Paradigm Shift from diploma-recognition based to competency-based master's admission.[1] This article[2] is a more elaborate version of that introductory note, reflecting also the progress in thinking and tool development since the start of the project. It is intended both for users of the Guiding Tools who seek more background and detail, and for readers with a general interest in the topic. For users of the Guiding Tools, it may give them additional reasons and arguments that they may find useful to increase commitment in their own university.

Keywords: Higher education; Europe; master's admission; diverse classroom; competency-assessment; internationalisation.

* Kees Kouwenaar (kees.kouwenaar@vu.nl) is senior advisor international strategy at the *Vrije Universiteit,* Amsterdam. He is also project manager of the Mastermind Europe project, funded as a Strategic Partnership in key action2 of the Erasmus+ programme.

[1] A competency-assessment approach to master's admission should not be confused with Competency-Based Education.

[2] The author acknowledges the support received from all members of the Mastermind Europe project team; outside the team, special acknowledgement is due to Robert Wagenaar (Tuning) and to Bas Wegewijs (Nuffic/Naric).

I. **Introduction**

Higher education and research have become increasingly international in character. Educational programmes are no longer designed with only domestic students and employers in mind. Increasingly, the focus is also on international students and a globalised labour market.

Global rankings, whatever methodological critique they may invoke, are here to stay and have a significant impact on Higher Education (HE) strategies and reform efforts.

In the European context, the Bologna reforms are a regional manifestation of general globalisation trends and their impact on internationalisation of higher education. But globalisation has a fundamental impact on graduate education in other regions as well: In the United States, where the mere numbers of international students in graduate programmes is becoming a driver of change; and in many parts of the world, where government policies aim to create or strengthen Flagship universities and to concentrate the brunt of the nation's graduate and research effort there.

Graduate programmes in Europe and in other parts of the world are becoming more explicit in the meta-cognitive learning outcomes. Besides proficiency in their area of academic or professional expertise, graduates from European master's programmes are expected to have other competencies like analytical and communication skills, capacity for interdisciplinary and creative thinking, group work competencies — all in an increasingly intercultural setting. This development, loudly and widely called for by labour market actors, is reflected for instance in the evolution of the Qualifications Frameworks, in the results of the Tuning process, in the Dublin[3] Descriptors in Europe and parallel developments towards Degree Profiles elsewhere.

Increasing diversity

— of required learning outcomes among graduates
— of content and purpose of master's programmes
— of disciplinary background of applicants
— of national / cultural background of applicants

We witness a broadening of our perception of HE degrees and programmes beyond a focus on academic — often mono-disciplinary — content and

[3] The term Dublin Descriptors to the cycle descriptors (or "level descriptors") which were developed between 2001 and 2004. The Dublin Descriptors have since been incorporated in the Qualification Framework of the European Higher Education Area in 2005.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

subject specific knowledge and skills. We now increasingly see descriptions of HE programmes and degrees also in terms of learning outcomes and sets of competencies; knowledge and technical skill did not lose importance, but are supplemented with non-cognitive skills and attitudes, which are seen as important for success in work and life. Identification of critical professional tasks and roles, and challenging professional situations, is used as a tool to bring together these cognitive and meta-cognitive aspects in a way that is recognizable for the professionals in the field.

A separate but related trend is that towards multidisciplinary, interdisciplinary and transdisciplinary master's programmes. These, by necessity, look for applicants from a variety of disciplinary backgrounds, making a one-size-fits-all knowledge prerequisite dysfunctional.

Thus, graduate programmes across the globe and across Europe face the need to attract students from a more diverse background,[4] as well as the need to have a closer look at the meta-cognitive dimension. They will get applicants from other universities in their own country, from other countries in the region, from other world regions. An increasing number of master's programmes is actually seeking applicants from a diverse variety of disciplinary background. Thus, they are faced with applications from a wider variety of subject knowledge and skills as well as a wide variety of educational systems. And they need to assess if these applicants will be able to reach all relevant learning outcomes of the graduate programme: not only the (cognitive) learning outcomes connected to subject-specific knowledge and skills, but also the (meta-cognitive) learning outcomes that relate to the student's general academic ability and personal competencies and traits.

Over the next few years, an increasing number of academic master's directors will see the need for their admission process to evolve from "recognition of diplomas" to "assessment of competencies". This requires a breach from tradition, a paradigm shift.

Traditionally in continental Europe, we tend to see admission to a master's programme as a right which all students have who successfully completed the preceding bachelor's programme at the same university. To have the adequate preceding bachelor's is both necessary and sufficient for admission — to borrow a concept from mathematics. This right of admission

[4] Council of the European Union, "Council Conclusions on the Global Dimension of European Higher Education" (EDUCATION, YOUTH, CULTURE and SPORT meeting, Brussels, 25-26 November 2013), accessed July 23rd, 2015, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/139717.pdf.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

can also be granted to other students with a bachelor's degree from outside: if it is sufficiently equivalent.

There has been a significant evolution of the way in which we decide if an "outsiders" bachelor's is admissible. Part of this article is dedicated to a description and analysis of this historical process — in which the Lisbon Recognition Convention plays a key role.[5]

On a different note, we see an increasing call to define admission requirements thinking "backwards": in this approach, the (externally oriented) objectives of the master's programme define the (internally oriented) designated learning outcomes. The learning outcomes in their turn define the curriculum; and the curriculum finally defines the admission requirements. This changes the admission concept from the question "who has the right to be admitted" to "how do we find the students who best fit in the master's programme?" This is the topic of the Mastermind Europe project initiated in 2014, which is discussed in this paper.

In this sense, the trend from diploma-recognition to competency-assessment as the basis for admission to master's programs fits well in the overall focus on (intended and achieved) learning outcomes. Neither "learning incomes" nor "incoming learning outcomes" is an expression that makes any sense in English; we will continue to use the term "entrance requirements" for want of a better term — more congruent with the Learning Outcomes terminology.

In the next paragraphs, we will delve a little deeper in these general shifts in the nature and purpose of master's programmes in Europe. Then we will zoom in on the paradigm shift for admission to master's programmes.

II. **Paradigm shift: Higher education degrees and programmes**

University degrees in Continental Europe are a product of history. Before the Bologna reform process, most systems of Higher Education in continental Europe knew only one degree before the doctorate. The basic idea of the pre-doctorate degree (*Magister, Doctorandus, Maîtrise, Laurea*, etc.) was that of the second-last step in the trajectory to become a full member of the Academic community. The final step of course was — and is — the doctorate / PhD.

Students of research universities were a small segment of their age group, groomed to become researchers like their professors. Their pre-

[5] See also the separate report of Prof Pavel Zgaga from Ljubljana University (forthcoming).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

doctorate degree was the proof that they were ready for the final step: conducting independent (but supervised) scholarly research, leading to the degree of Doctor as the proof of competence in research and university teaching.

This notion — that university education was intended to reproduce scholars, has already for long been an illusion to some extent. In Engineering, Business, Medicine, and Law — not the least populated parts of the university — this has been very obvious. Especially since the expansion of university education since the second half of the 20th century, more and more university graduates never pursued — or aimed to pursue — a career within academia.

Indeed, more and more university graduates even found themselves in gainful employment in professions which had little to do with the academic discipline in which they graduated. Employers and other stakeholders of the labour market stress the importance of "soft skills" of university graduates which enable them to work successfully in teams; diverse teams in academic, and increasingly also cultural terms.

In the knowledge-and-network-society, it is the combination of what-you-know and whom-you-know, the ability to use one's expertise effectively in networks, that decides what value one can bring. But nonetheless, the notion was there and still persists — in varying degrees among across the disciplines — that only students with potential for a scholarly career are 'real' students or 'really interesting' students.

Higher education programmes have evolved over history; they have been shaped to a large degree by the professors in the discipline. These professors naturally have a strong focus on research and on the cognitive dimension: on the knowledge and technical skills, and on the methodological and theoretical framework belonging to that particular discipline. In fact, even where they recognize the importance of the soft skills, they often feel out of their depth in helping students to achieve those skills and in assessing if they have indeed achieved them.

Traditional academic studies have the outward appearance of a collection of subject oriented courses taught by subject specialists, completed with a thesis to prove scholarly competences. How these together constitute a coherent programme leading to a well-educated specialist was a seldom-asked question. The programme's coherence was accepted as a time-created fact-of-life rather than analysed, designed and constructed.

When HE systems moved over to the three-tier system — of bachelor's, master's and PhD degree — of the Bologna process, the old notions persisted. But over the last decades, also new ideas about higher education and HE degree programmes have surfaced: the value of study abroad, the notion of

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

an open European Higher Education Area, ECTS, the Tuning process, the evolution of a European as well as National Qualification Frameworks, the notion of Degree Profiles with learning outcomes and competencies (including, but not limited to, subject specific knowledge and skills) and quality standards, all have attracted broad attention among educationalists and more limited attention among subject specialists.

All of these developments are directly related to outcomes of education and comparison of these outcomes. A slightly different, but related topic is that of quality assurance. This has also been a prominent element in recent developments, e.g. with the development of Standards and Guidelines for quality assurance in the European Higher Education area[6]. Quality assurance and its contribution to accountability in HE is not at the centre of this argument or of the Mastermind Europe project. To the extent that the project contributes to more measurable outcomes of higher education process, it may help to strengthen the outcome-part of quality assurance mechanisms, which tend to have a more heavy focus on process elements.

Below, we will describe some of these phenomena in somewhat more detail.

Initiatives to respond to diversity

— ECTS
— Tuning
— National and European Qualification Frameworks
— Degree Profiles
— Lisbon Recognition Convention

II.1. *ECTS*

The European Credit Transfer System[7] was developed already within 2 years after the start of the first ERASMUS programme, with dr. Fritz Dalichow as the driving force.[8] At the outset, it was intended primarily as a means to transfer credit for students who spent a period abroad in the context of their home university degree program. But over the years, it has evolved

[6] ENQA e.a., "Standards and Guidenlines for Quality Assurance in the European Higher Education Area", accessed December 6th, 2015, https://www.eqar.eu/fileadmin/documents/e4/ESG_-_draft_endoresed_by_BFUG.pdf.

[7] See ECTS Users Guide for an extensive description.

[8] See Dalichow, Fritz. "European Community Course Credit Transfer System." *Higher Education in Europe* 15.2 (1990): 72-73.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

into a broad range of experiences, concepts and tools that are also useful in the design, description and delivery of teaching programs, helping to integrate different types of learning.[9] It creates a common language for education, independent of delivery mode (in the classroom, at the workplace, through distance, full-time or part-time), and in formal, informal or non-formal learning contexts. The ECTS philosophy and its tools have been an important source of inspiration of the Bologna process and at a later moment have been aligned with other elements of it, including the European Qualifications Frameworks. It offers an extensive and authoritative glossary, also including descriptions of 'learning outcome' and 'competence' — discussed below in comparison with the Tuning descriptions of the same concept —, as well as samples of learning outcomes.

II.2. *Tuning*

TUNING Educational Structures in Europe started in 2000 as a project to link the political objectives of the Bologna Process and at a later stage the Lisbon Strategy to the higher educational sector. Over time Tuning has developed into a Process, an approach to (re-)designing, develop, implement, evaluate and enhance quality (of) first, second and third cycle degree programmes. The Tuning outcomes as well as its tools are presented in a range of Tuning publications, which institutions and their academics are invited to test and use in their own setting. The Tuning approach has been developed by and is meant for higher education institutions.

The name Tuning is chosen for the Process to reflect the idea that universities do not and should not look for uniformity in their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply look for points of reference, convergence and common understanding.

The protection of the rich diversity of European education has been paramount in Tuning and in no way seeks to restrict the independence of academic and subject specialists, or undermine local and national authority.

Tuning focuses not on educational systems, but on educational structures with emphasis on the subject area level, that is the content of studies. Whereas educational systems are primarily the responsibility of governments, educational structures and content are that of higher education institutions and their academic staff.

From: Tuning website (http://www.unideusto.org/tuning)

[9] ECTS Users Guide, p.6

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

The Tuning Methodology was developed to enhance understanding and comparability of curricula, with a key role for the academic experts in the subject concerned. These academics looked at generic and subject specific competences, at ECTS as a system for accumulation of achieved learning outcomes, at approaches to teaching and learning and approaches to assessment, and finally also at the role of quality assessment.

For new programmes, Tuning developed a model for the design and implementation of curricula,[10] which proceeded backwards: Based on an external needs analysis and ensuing degree profile, it worked through degree objectives and designated learning outcomes to required subject-specific and generic academic competences. From these it went towards the curriculum's content and structure, with defined learning outcomes and teaching, learning & assessment modes for each component of the curriculum.

The Tuning experts were well aware that the Bologna reform requires that each of the three cycles have their specific sets of learning outcomes and competences: for access to the next cycle as well as for entry into the labour market. With learning outcomes also as the articulation of what is needed for admission to the next cycle, the connection between learning outcomes and admission requirements becomes obvious.

Tuning made a distinction between:

a) *learning outcomes* as a measurable result of a learning experience which allows us to ascertain to which extent / level / standard a competence has been formed or enhanced. Learning outcomes are not properties unique to each student, but statements which allow higher education institutions to measure whether students have developed their competences to the required level state the students know, can demonstrate, and understand after a specific unit of the curriculum (course unit); and
b) *competences* which is seen as a quality, ability, capacity or skill that is developed by and that belongs to the student.

This set of definitions differs from the definition in the ECTS Users Guide,[11] also quoted by Kennedy:[12]

---

[10] Jenneke Lokhoff et al., eds., *A Tuning Guide to Formulating Degree Programme Profiles*. (Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010).

[11] European Commission ECTS Users' Guide, 2015, p 72 & 67; downloaded from http://ec.europa.eu/education/library/publications/2015/ects-users-guide_en.pdf on 2-11-2015.

[12] Declan Kennedy, *Writing and using learning outcomes: a practical guide* (University College Cork, 2006).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

Learning outcomes are statements of what a student is expected to know, understand and/or be able to demonstrate after completion of a process of learning.

Competence is the ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.

The key difference between a) learning outcomes and b) competencies doesn't lie in the fine line between "… what a student is expected to ….." and "… the ability to use …". It is rather in the zooming in of the "learning outcomes" definition on the specific condition of "… after the completion of a process of learning." Learning outcomes may in practice be more specific, "smaller" than competencies. But the key distinction is that learning outcomes are the result of a learning process; in other words, learning outcomes are a specific kind of competencies, namely those that were achieved through a learning process.

As the ECTS definitions are both more concrete and aligned with the European Qualifications Framework, we will use the ECTS definitions in the article and in the Mastermind Europe project. But there is no real contradiction between the Tuning and the ECTS definitions, and it is still valuable to look at the distinction in Tuning within the broad concepts of learning outcomes and competencies.

Tuning distinguishes three types of generic competences:

— Instrumental competences: cognitive abilities, methodological abilities, technological abilities and linguistic abilities;
— Interpersonal competences: individual abilities like social skills (social interaction and co-operation);
— Systemic competences: abilities and skills concerning whole systems (combination of understanding, sensibility and knowledge; prior acquisition of instrumental and interpersonal competences required).

In the context of the Mastermind Europe project (which will be explained later in this document), we may note that this distinction among competencies can also be used to distinguish between categories or aspects of learning outcomes. The first two types are similar to the "academic competences" and "personal competencies and traits" in the Mastermind Europe project.

The Tuning methodology claims that the use of learning outcomes allows for much more flexibility than more traditional — knowledge-focused — study programmes, because they show that different pathways can lead to comparable outcomes.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

The Tuning methodology further argues that a focus on learning outcomes and competences helps to get away from the curriculum as a mere collection of the fields of interest of the teaching staff and/or as a collection of study points. It helps to move towards a student centred process of achieving the skills and knowledge required by the discipline and by society. In the Tuning methodology, each module or course unit in the curriculum should have its designated role in furthering the achievement of subject-related knowledge and skills as well as contributing to the development of a limited number of the generic competences identified for the degree profile.

In the words of Robert Wagenaar,[13] Tuning's unique contribution is the alignment of the concepts of "competences" and "learning outcomes", relating both concepts to the (degree) profile of the educational programme.

The focus of Tuning on competences and learning outcomes was not new or unique. Wagenaar refers to a 1995 article of Robert Barr and John Tagg;[14] the Lisbon Convention of 1997[15] showed a similar tendency towards a functional approach of degrees: it calls for a comparison of what degree-holders know, understand and are able to do, rather than comparison of length of study or type of courses.

But Tuning was very successful in setting the agenda, not least because it managed to get embedded both in the Bologna reform process and the Lisbon Strategy of the European Union.

On a different footing, the OECD's DeSeCo project, launched in 1997,[16] identified:

a) Competencies to use tools effectively (i.e. language, knowledge, technology);
b) Competencies to interact in heterogeneous groups (building personal relationships; working in groups, managing conflicts); and
c) Competencies to act autonomously (see oneself and act in the bigger context, plan for the future, defend & assert rights and needs).

---

[13] Robert Wagenaar, "Competences and Learning Outcomes: A Panacea for Understanding the (new) Role of Higher Education?," *Tuning Journal of Higher Education* 1, no. 2 (2014): 279-302.

[14] Robert B. Barr and John Tagg, "From Teaching to Learning. A New Paradigm for Undergraduate Education," *Change. The Magazine for Higher Education* 27, no. 6 (1995): 13-25, available at: http://www.athens.edu/visitors/QEP/Barr_and_Tagg_article.pdf.

[15] "The Lisbon Recognition Convention [Main Documents]," Council of Europe, accessed February 19th, 2015, http://www.coe.int/t/dg4/highereducation/recognition/lrc_EN.asp

[16] Dominique Simone Rychen and Laura Hersh Salganik, eds., *Key Competencies for a Successful Life and a Well-Functioning Society* (Göttingen: Hogrefe and Huber Publishers, 2003), 5.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

This approach, although interesting, seems less widely used within the context of HE degree programmes.

II.3. *National and European Qualifications Frameworks*

In 2005, the EU Education ministers decided to work towards an overarching framework of qualifications in the European Higher Education Area[17] and committed themselves to elaborating national Qualifications frameworks before 2010. The EHEA qualifications framework is connected to the European Qualifications Framework initiated by the European Commission, which uses 8 levels to cover the educational edifice from the basic levels of secondary education and vocational education and training (VET) to the PhD, with level 5 to 8 overlapping with the HE notions of the short cycle, 1st, 2nd, and 3rd cycle Higher Education in the EHEA qualifications framework (EQF).

The EHEA framework describes the outcomes of Higher Education at the first cycle, second cycle and third cycle levels, using the language of competencies to do so. It refers to the ability to "demonstrate knowledge and understanding" in the specified field, the ability to "apply" such knowledge and information in — professional or academic — environments of increasing complexity and uncertainty, to "formulate judgements" taking social and ethical dimensions into account, to "communicate" about their field with specialist and non-specialist groups, and to "continue learning" in an autonomous and self-directed manner. As stated in the 2009 report of the Coordination Group for Qualifications Framework:[18] "Developing and describing learning outcomes is, in the view of the Coordination Group, one of the greatest challenges with which the European Higher Education Area will continue to be confronted over the next few years and will require continued exchange of experience across the EHEA."

---

[17] European Higher Education Area [EHEA], "The Framework of Qualifications for the European Higher Education Area," accessed December 12, 2014, http://www.ehea.info/Uploads/QF/050520_Framework_qualifications.pdf ; Bologna Working Group on Qualifications Frameworks, "A Framework of Qualifications of the European Higher Education Area" (Copenhagen K: Ministry of Science, Technology and Innovation, Denmark, 2005), accessed December 12, 2014, http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/050218_QF_EHEA.pdf

[18] BOLOGNA PROCESS Coordination Group for Qualifications Framework, "Report on Qualifications Frameworks" (Strasbourg: Council of Europe, 2009), accessed December 12, 2014.http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/2009_QF_cg_report.pdf

The paradigm shift from descriptions of HE programmes in terms of years of study to learning outcomes — as statements of what a learner is expected to know, understand and/or be able to do — is described by Karseth and Solbreke.[19] They warn that the shift towards an approach to HE programmes that is more oriented on learning outcomes and competencies is complex and time-consuming.

The EHEA qualifications framework does not make an analytical distinction between various kinds of competences, such as subject-related, general academic and personal/interpersonal competencies.

As noted in the EHEA working Group report,[20] qualifications frameworks facilitate recognition by providing complete and reliable information on quality, workload and level; by emphasizing and describing learning outcomes, in particular generic learning outcomes; and by providing some information on profiles and specific learning outcomes, even if these will need to be complemented by further information if the profile of a given qualification is important to the purpose for which recognition is sought.

On the EHEA Bologna Process website,[21] an overview is provided of the current state of affairs of national Qualifications frameworks development. By December 2014, nine European countries had sent in a report on the compatibility of their National Qualifications Framework with the EHEA Qualifications framework. Some reports also contain detailed information on the national Qualifications framework and the descriptors for the various cycles; others concentrate on the compatibility issues. According to Helgø,[22] who analysed NQF development in Norway, Germany and the UK, there was broad support for the EHEA QF driven implementation of a NQF in Norway and Germany, while the NQF development in the UK actually preceded the European development (See also Young). In Germany, the strong "dual learning" system of apprenticeship-based and school-based learning was a positive factor. Helgøy shows that in each of these three countries, the focus of the NQF development was clearly on learning outcomes.

---

[19] Berit Karseth and Tone Dyrdal Solbrekke, "Qualifications Frameworks: The Avenue Towards the Convergence of European Higher Education?," *European Journal of Education* 45, no. 4 (2010): 563-76.

[20] EHEA Working Group, "Report by the EHEA working group on recognition," accessed December 6th, 2015, http://www.ehea.info/Uploads/(1)/Recognition%20WG%20Report.pdf

[21] European Higher Education Area [EHEA], "National Qualifications Frameworks," accessed December 12, 2014, http://www.ehea.info/article-details.aspx?ArticleId=69

[22] Ingrid Helgøya and Anne Hommea, "Path-Dependent Implementation of the European Qualifications Framework in Education. A Comparison of Norway, Germany and England [Version of Record], " *Journal of Comparative Policy Analysis: Research and Practice* (2013): 1-16.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

The conceptual link between National Qualifications Frameworks and Learning Outcomes is not restricted to Europe. In his 2007 report for the ILO, Ron Tuck[23] states:

> A Qualifications Framework is an instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes, i.e. clear statements of what the learner must know or be able to do whether learned in a classroom, on-the-job, or less formally.

II.4. *Degree profiles*

Building on the work of the Tuning project and the earlier work of the ENIC/NARIC networks for recognition of academic qualifications, the European Commission supported two projects on "Competences in Recognition and Education" (CoRe 1 and 2) of Tuning and ENIC/NARIC together. The aim was to see if and how the notion of a "degree profile" could be used to improve recognition practice. CoRe 1 (2005-2007) focused on the question if "degree profiles", as developed in Tuning, can be a useful tool to enhance recognition of academic qualifications. It concluded that this is indeed the case, provided that enough similarity could be achieved in the terminology that universities use to describe the competences and learning outcomes.

CoRe 2 (2008-2010) consequently had one single objective. In the "Guide for formulating Degree Programme Profiles" (the final report of the CoRe2 project published on the Tuning website) it is stated as follows: "to provide a guide with instructions on how to describe the competences and learning outcomes of the degree profile in a consistent way, together with examples illustrating this."[24]

The Guide contains a "Template" with guidelines for constructing a degree profile. It offers a clear distinction between the concepts of "competences" and "learning outcomes" and provides information on how to formulate them. The CoRe2 project has tested the template with both recognition and HE experts and a number of guinea pig universities.

---

[23] Ron Tuck, *An Introductory Guide to National Qualifications Frameworks: Conceptual and Practical Issues for Policy Makers* (France: International Labour Organization [ILO], 2007), 2.

[24] Lucie de Bruin, foreword to *A Tuning Guide to Formulating Degree Programme Profiles*, ed. Jenneke Lokhoff et al. (Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010), 11-12.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

Indeed, the Guide articulates some of the key notions underlying the Mastermind Europe project, described in this "Paradigm shift" article:

> Student-centred programmes require a change of paradigm and hence a change of mind set of the academic staff responsible for designing and delivering degree programmes. (….) degree programmes should be organised in view of their desired results. At present, in practice, many degree programmes are designed on the basis of tradition and the resources already available. Such programmes can be considered as 'input-based' and 'staff-centred'. In such programmes the emphasis is still placed on the individual interests of academic staff or on the existing organisation of studies.[25]

The Guide sees the Degree Profile as a concise expression of the key results of the programme. It focuses on 7 elements: a) Purpose, b) Characteristics, c) Employability & further education, d) Education style, e) Programme competences, and f) Learning outcomes.[26] For our purpose, we focus on the latter two: competences and learning outcomes.

In a similar vein, the University of Calgary gives specific information for each and every degree programme on: a) Key skills and knowledge, b) Sample job titles, and c) potential industries.

The Guide for formulating Degree Profiles makes a slightly different distinction between Competence and Learning outcome than the Tuning project did earlier. Where Tuning focuses on the distinction between course unit (~learning outcome) and complete degree programme (~competence), the Degree Profiles Guide argues that Learning outcomes are objectively measurable results of a learning experience, whereas Competences are qualities, abilities, capacities or skills belonging to an individual student. This seems a less sharp and clear distinction, as the defining elements are not mutually exclusive.

Like the Tuning publications, the Degree Profile Guide doesn't make a clear categorisation between competences related subject specific knowledge and skills, to general academic ability, and to personal competencies and traits. The Guide refers to the so-called "Dublin Descriptors" as the essential components of any degree programme.

Interestingly, the non-profit Lumina Foundation in the US published in 2011 a Degree Qualifications Profile.[27] It is intended as a tool to help define

---

[25] Jenneke Lokhoff et al., *A Tuning Guide to Formulating Degree Programme Profiles* (Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010), 19.

[26] Jenneke Lokhoff et al., *A Tuning Guide,* 20.

[27] Peter T. Ewell, "The Lumina Degree Qualifications Profile (DQP): Implications for Assessment" (Occasional Paper 16, Champaign: National Institute for Learning Outcomes Assessment, 2013).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

what students are expected to know and be able to do once they have obtained their degree. It was designed to challenge faculty and academic leaders to think about expectations for student learning outcomes across higher education. It still remains to be seen what impact the Lumina Degree Qualifications Profile will have on higher education in North America.

II.5. *Mastermind Europe project*

Thus, one sees that there has been a growing focus in higher education degree programmes on competences and learning outcomes — not instead of the focus on content and study load, but in addition to it. There is one important element in which the Mastermind Europe project differs in this respect from Tuning, Qualifications Frameworks and Degree Profiles.

The former initiatives all aim to articulate measurable Competences and Learning outcomes at the end of the education programme. They all aim to help and stimulate universities to send their graduates away with measurable and fairly homogeneous Competences and Learning Outcomes that are recognisable anywhere else.

The Mastermind Europe approach takes the perspective of the applicant student and the receiving institution: it aims to develop a toolkit for academic masters directors to identify:

a) which substance-related knowledge & skills (SRKS);
b) which general academic competencies (GAC); and
c) which personal competencies and traits (PCT)
they require as minimal entrance requirements.

The chosen categorisation (SRKS, GAC, PCT) seems the best mix of theory found in psychological literature and practice within Higher Education with elements of competencies-based assessment.

The Mastermind Europe toolkit will also help to test whether individual applicants meet with these specific requirements and will help to provide prospective students with adequate information on these requirements, allowing for a successful match between students and master's programmes.

One may argue either way in terms of which approach — end-of-programme or start-of-programme — is more logical. If all HE institutions would define the Competences and Learning outcomes of their degree programmes in measurable terms (preferably not a myriad of them), that might be an excellent solution. But as (long as) this is not the case, a toolkit

to assess the competences of applicants from a variety of backgrounds in discipline and educational system will prove to be of high value. It may indeed take a long time to achieve this excellent solution, as it requires consensus a) among subject specialists + educational specialists + government representatives, b) in all disciplines and interdisciplinary subjects, c) in all the countries of the European Higher Education Area.

Definition of measurable entrance criteria for specific master's programmes may prove to be easier. It requires only the consensus of subject specialists, educational and administrative stakeholders at the level of the programme and the institution — within the confines of the relevant regulations. It remains a challenge to identify common criteria and benchmarks at the entrance of master's programmes — but a common language is easier to create than agreement on what is going to be said in it. And the notion that master's programmes have differing entrance requirements may be less contentious than differing outcome levels of university degrees across Europe.

In a broader perspective, the difference sketched here between the 'end-of-programme' approach in the various initiatives around learning outcomes, and the 'start-of-programme' approach in Mastermind Europe may in reality more a complementarity than a difference. Both approaches attempt to design a common language to articulate what students need to know, understand and/or be able to demonstrate: for successful conclusion or for successful admission to a program. Both approaches attempt to bridge the cleft between subject specialists in class and in the workplace — who need to recognize these learning outcomes or admission requirements as 'their own'- and the educationalists and policy makers who want to have a terminology that allows for cross-country and cross-discipline comparisons.

III. Paradigm shift: 'Outside' admission from exception to standard practice

Admission to master's programmes of students who did their preceding bachelor's at another domestic or foreign research university grew from 17% in 2005/06 to 27% in 2013/14 in Dutch research universities. The total admission of students from 'outside' remained roughly stable at ca 40%, because the period saw a significant drop in students transferring from Dutch Universities of Applied Science to research universities. At the Vrije Universiteit (VU University Amsterdam), the proportion on 'outside' master's students even exceeds 50%.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

In France, the proportion of master's students 'not previously registered' at that university was 42,1% in 2012/13 (MESR).

Data from two countries in continental Europe are no solid evidence base, but they are indicative of a trend. The same can be said for the numbers of visits to the Mastersportal of StudyPortals, which have been increasing from less than 2 million in 2010 to more than half a million *per month* this year.

There is a clear trend in increase of master's applicants who were not before registered at that university. In other words: applicants from 'outside' are rapidly changing from an odd exception to at least a substantial minority of all students in the master's programme. This has consequences for the grounds on which decisions of admission and non-admission can be taken. When the overwhelming majority comes from the same university and in the same discipline as the master's programme, it makes sense to define admission in terms of that preceding bachelor's programme and treat 'outsiders' in that context. It makes sense to check if 'outsiders' are similar enough to the standard set by the bachelor's programme of the overwhelming majority.

But this standard loses validity when 25, 30 or even 50 percent of the applicants have another educational background: from another domestic university, from another discipline or from another country. Then the argument becomes more pressing to have an admission practice, admission criteria and admission procedures that are more generic in nature, more applicable to a wider variety of cases.

The shift of 'outside' applicants from exception to at least significant majority has yet another consequence in terms of admission. With exceptional 'outside' admission, it is still possible to maintain the concept of 'right of admission' for the university's 'own students', but have a selective admission process for international students. For domestic students — usually including those from other universities in the country — the appropriate bachelor's diploma will suffice for admission; for international students, a qualitative assessment is often in place. But with the rising numbers of international applicants — and also in response to other trends sketched in par. 2 "Paradigm shift: HE degrees and programmes" — the question arises more and more whether admission should not become selective for domestic students as well.[28] If bachelor's graduates may choose between a wide variety of ensuing master's degrees, if master's programmes seek students from a wide variety of backgrounds, then a given bachelor's degree no longer constitutes a guarantee an automatic fit/match with master's programmes.

[28] Hans Pechar and Ada Pellert, "Austrian Universities under Pressure from Bologna," *European Journal of Education* 39, no. 3 (2004): 317-30.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

Under these conditions, pressure increases to have an admission framework that meets criteria of transparency and validity. Transparency in the sense that it can be understood also by potential students — and their sponsors — who are less familiar with the university and the HE system to which it belongs. Validity in the sense that the university and the master's programme monitor the actual predictive value of the elements that they use in the admission process and the admission decision.

IV. **Master programmes**

Imagine a room with three doors as a metaphor of the bachelor's programme: one is the entrance, one (narrow) is the successful exit and one (broad) is for drop-outs. Those who pass through the door of success, immediately find themselves in the next room: that of the master's programme 'belonging' to the bachelor's. This symbolizes the pre-Bologna conceptual thinking in Continental Europe about the transition from bachelor's to master's.

Imagine now a similar room, also with three doors: one again is entrance, one (fairly broad) is the successful exit and one (fairly narrow) is for drop-outs. But those who pass through the door of success, will find themselves in a large Hall, with an array of doors of different shapes and sizes. The Hall itself is a kind of maze; a person who wants to get to a certain door, needs to navigate before s/he can try to open it. This symbolizes competence-based master's admission.

The gradual shift from the room-to-room to the room-hall-room transition needs to be placed in a wider context. Part of this context is the evolution in thinking about the treatment of foreign qualifications from "equivalence" to "recognition" to "acceptance" (see the paragraph below). In this evolution, we may observe already elements of a "competency-assessment" approach in the practice of recognition, as demonstrated i.a. in the Lisbon Convention, in the Automatic Recognition policy and other developments in the NARIC network, such as the "5 elements approach". Other parts of this context are the trend to define master's programmes 'backwards' from their intended outcomes, and the need for a more diverse classroom in many master's programmes and in European higher education as a whole.

The increased interest in Europe for standardised tests like the GRE (Graduate Record Examination) and GMAT (Graduate Management Admission Test) is also relevant in this context. This concerns European universities at which GRE and GMAT are used to assess applicants. But it

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

equally concerns European students who submit to these tests in order to qualify for admission to graduate programmes in the US.

V. **Developments in Recognition**

Now, we will give a brief description of the developments in "recognition" and how these fit with the trend to focus more on learning outcomes, competencies, and comparability of degree profiles described in chapter 1. From there we will turn to the notion of competency-based admission as an alternative to recognition of a degree.

V.1. *Evolution from equivalence to recognition to acceptance*

The analysis of more than 20 years ago of the evolution from equivalence to recognition to acceptance is still valid:

> Equivalence, which requires an exact match in content as a precondition for recognition, has been gradually replaced by Recognition, which requires a match in functions and general level of the academic qualification. (…) However, the increased intensity of international cooperation and exchange between educational systems, which will remain highly diverse, calls for (…) a more tolerant and less mathematical approach (…).[29]

The 1994 article of this author describes how the General Directives (89/48/EEG; 92/51/EEC) of the European Union were leading the way towards such a more flexible "acceptance" approach, as these directives introduced the concept of "substantial difference": recognition could not be withheld on the grounds of any difference, but only on the grounds of substantial difference. The article also already underlined the factor of selective admission: where admission to a next phase is selective anyway, more flexibility in recognition of the degree is possible as it is only one of the selection criteria, which may be counterbalanced by other selection elements. Kouwenaar puts these developments in the perspective of the new Joint Convention, which was at the time being discussed and would become the Lisbon Recognition Convention in 1997.

Since the early General Recognition Directives of 1988 and 1992, the EU has moved further along this path. It has regulated that professionals must be

[29] Kees Kouwenaar, "Recognition Instruments in Europe," *Higher Education in Europe* 19, no. 2 (1994): 7-26.

admitted into regulated professions, allowing the host country to require a compensatory measure in case of substantial differences between the training acquired and the training required in the host country. The professional has the choice between an adaptation period and an aptitude test. This system is now ruled by the "general system for the recognition of qualifications" (2005/36/EC), which will be amended by European Directive 2013/55/EU as of January 2016.

V.2. *Elements of competency-assessment in recognition practice*

The European Area of Recognition manual for Higher Education Institutions[30] may be used to demonstrate that current recognition practice does indeed contain elements of competency-assessment, although often in an implicit manner.

The manual mentions the accreditation status of the university that issued the degree under review (See EAR HEI p 11).[31] There is a formal as well as a qualitative aspect involved: without accreditation by a properly authorised and recognised body, the qualification is simply laid aside. But the kind of accreditation may — and does — also play a role. It makes a difference if the degree-issuing university is accredited as a "research university" or not. Recognition experts will — implicitly or explicitly — assume that a bachelor from a "research university" has a higher general academic competence than a bachelor from a HEI without such a research profile.

As recognition is also based — according to the manual and standard practice — on comparison of "degree profiles", it is thus also taking the "learning outcomes" and "competencies" into account.

Grades are generally considered to be of importance in the admission process. Assessment of grades implicitly assumes that high grades are a proxy for general academic competency. Still, good recognition experts weigh these grades in the context of educational culture and philosophy: high grades may mean excellent memorisation in one culture and may mean creativity and assertiveness in another.

Not mentioned, but often used in universities' admission practice, is the element of looking at research excellence (through Global Rankings or e.g.

---

[30] Nuffic (Netherlands organisation for international cooperation in higher education), *The European Recognition Manual for Higher Education Institutions* (The Hague: Nuffic, 2014).

[31] Nuffic *European Recognition Manual,* 11.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

the Hirsch index of individual researchers). When research excellence is taken into account, it is used as an indication of educational quality in general and also as an indication of the general academic competencies of individual graduates.

V.3. *Current practice and developments in Recognition*

V.3.1. Lisbon Convention and Criteria and Procedures

As stated before, the 1997 Lisbon Recognition Convention is an important landmark in the development of recognition practice. It ordains that recognition should be the default practice and non-recognition should be the motivated exception; it lays the burden of proof (that recognition is not due) with the national or institutional authorities, where before the Lisbon Convention the burden of proof (that the foreign qualification as good enough) had lain with the applicant. And it rules that recognition may not be withheld on the basis of any difference — however minute — but only on the basis of substantial differences. Again, the burden of proof that such difference exists and is substantial, lies with the recognition authorities.

The ensuing documents on Criteria and Procedure have developed this concept further and have created a mechanism for the exchange of ideas and practices among recognition authorities; the intent was that this would lead to a convergence towards the best — most flexible — practice. However, as argued by Blomqvist[32] and de Bruin,[33] 15 years after the adoption of the Lisbon Recognition Convention there was and is still a *"lack of systematic and fair application of LRC and subsequent texts*.

V.3.2. Automatic recognition

This analysis of less-than-satisfactory results of recognition instruments and processes was shared at the level of the ministers of Education in the

---

[32] Carita Blomqvist, Lucie de Bruin, and Jenneke Lokhoff, "From Principle to Practice — Towards Fair Recognition in the EHEA," *Journal of the European Higher Education Area*, no. 04 (2012): 41.

[33] Lucie de Bruin, "With Both Feet on the Ground: EAR Projects, Instruments for Recognition," in *The Lisbon Recognition Convention at 15: Making Fair Recognition a Reality (Council of Europe Higher Education Series No. 19)*, ed. Sjur Bergan and Carita Blomqvist (Strasbourg: Council of Europe Publishing, 2014), 207.

European Higher Education Area. Automatic recognition is a fairly new concept that is explored by the 'pathfinder group on automatic recognition' in preparation of the Bologna Ministerial Conference in Yerevan 2015. As stated by the director of the Netherlands NARIC:

> As the Education Ministers of the European Higher Education Area were not satisfied with the progress in solving recognition obstacles to mobility, they articulated the need to work towards automatic recognition of comparable degrees and called for a "European Area of Recognition" (EAR) and for the use of the EAR manual.[34]

The Pathfinder report[35] had one main recommendation for the EHEA ministers: "… ensure that qualifications from other EHEA countries are recognised on an equal level with domestic qualifications, for example through enacting specific legislation to achieve this objective". In addition, it formulated a number of smaller steps, i.a. the review of national legislation, focus on time limits, promotion of the Diploma Supplement and others.[36]

While the Pathfinder Group on Automatic Recognition was still working on their recommendations, a new type of 'Policy experimentation' project was launched by the EC, with one of their priorities being the implementation of automatic recognition. In a remarkable new type of collaboration, a consortium of ministries of higher education, NARIC centres, higher education institutions, rectors' conferences and accreditation organisations applied for a project called Focus on Automatic Institutional Recognition (FAIR).

Quoting from the FAIR Project proposal ("Focus on Automatic Institutional Recognition"):

> Automatic recognition follows the principles of the LRC and aims to simplify recognition processes by standardizing specific steps in the recognition process. Automatic recognition makes use of the national Qualifications frameworks in achieving recognition at system level ('a bachelor is a bachelor'). Automatic recognition therefore should reduce deviations in recognition decisions across the EU and EHEA, and lead to removal of mobility obstacles through more consistent evaluations and streamlining of recognition practices. Moreover it is expected it will also reduce the time needed for evaluations, which will serve students and

[34] De Bruin, "With Both Feet on the Ground," 207.

[35] EHEA Pathfinder Group on Automatic Recognition, "Report by the EHEA Pathfinder Group on Automatic Recognition" (EHEA 2014), available at: http://www.ehea.info/Uploads/SubmitedFiles/12_2014/154205.pdf.

[36] EHEA Pathfinder Group, "Report," 7.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

> employees wishing to study and work in another country. All in all, automatic recognition is widely expected to improve recognition practices substantially.[37]

In this manner, the project is hoped to address in particular the lack of awareness at the level of universities of all the progress made in recognition and stimulate the articulation of comparable learning outcomes and competencies at the end of university degree programmes. Thus, it will have to work within the confines of the sometimes less-than-specific and measurable descriptors in the Qualifications frameworks, degree descriptors and Tuning outcomes.

In addition, it attempts to enhance the technical expertise of administrative staff at universities who work on recognition of diplomas and credential evaluation. It aims to achieve more consistency across Europe in the use of what the NARICs see as the 5 core elements of a degree or diploma under evaluation: the level (in terms of the Bologna three stages of B-M-PhD); the workload (for which the European standard unit of the ECTS applies), the quality (for which NARICs look at quality assurance mechanisms, while some also make use of e.g. the Carnegie classification and Global Rankings such as ARWU Shanghai Jiaotong[38]), the degree profile (e.g. theoretical versus applied, broad or specialized, mono- or multidisciplinary), and the learning outcomes (generic and subject-specific).

VI. **Competency-based admission as an alternative to recognition**

The Mastermind Europe project is based on the hypothesis that neither the work on exit competencies (Tuning, Qualifications Frameworks, Degree Profiles) nor the work on Recognition (Lisbon Convention, Automatic Recognition) will offer sufficient tools to grapple with the huge and growing diversity in a) master's programmes and b) master's students in Europe. Lenient recognition on the basis of comparable degree profiles will not do the trick. Exit competencies — particularly when formulated through political negotiations — will seldom be specific and measurable enough to allow for automatic recognition. That is why an alternative approach needs to be explored: to formulate specific and measurable entrance requirements that

---

[37] Nuffic/NARIC, *Key Action 3 EACEA/10/2014 Full proposal Application Form "Focus on Automatic Institutional Recognition*, 26. Not public.

[38] NARICs also acknowledge that quality is a far too complex concept to be captured in such simple and contested instruments.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

allows for diversity of applicants and master's programmes and facilitate transparency and validity checks.

If we look for solid ground for a competency-assessment based admission to master's programmes in Europe, we can look at practice elsewhere and/or we can look in the literature. For relevant practice, it is useful to look at admission practice at North American research intensive universities. There are very fundamental and philosophical differences between university education in North America — in the USA and to a lesser extent in Canada — on the one hand and university education in the various parts in Europe. Indeed, the university traditions in the various parts of Europe also vary significantly between adherents to the Humboldtian tradition, Anglo-Saxon, French, Southern European, eastern European and North-western European university traditions.

But most continental European university systems have a common characteristic distinguishing them from Anglo-American universities, which is relevant to our paradigm shift. In Continental Europe, an educational diploma has not only value as the demonstration of successful completion of the educational programme; it also has value as an entitlement to a next step, be it admission to a subsequent educational programme or to a specific profession or position in society.

In North America and the United Kingdom, an educational diploma or degree gives no such right per se. Whoever has successfully completed an educational programme, may apply for admission to the next step. But this is not a right: additional requirements may be imposed or additional tests may be required to determine if the candidate is indeed suitable for this next step. This tradition of entrance selection has — regardless of any value judgement that might be passed — has given American master's programmes a wide and long experience in establishing admission criteria in the cognitive as well as in the meta-cognitive domain.

Looking at relevant experience elsewhere may be useful in order to learn from and emulate good practice, but also to learn from and fundamentally adapt practices that are not suited to the European context.

As part of the Mastermind Europe project, substantial efforts were and are undertaken to identify and analyse relevant literature from the relevant branches of psychology research.[39] This literature has been used to write the first public draft Guiding Tools[40] as one of the tangible outcomes of the Mastermind Europe project. In the further course of the project, the

[39] Social psychology, psychology of learning, behavioural psychology.

[40] See below and on http://mastermindeurope.eu/tools-and-reference-material/#downloads

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

collected literature will be made accessible (bibliographically, URL, short description).

If we look for solid ground in psychological and pedagogical literature, we first of all see a body of literature on personal traits and competencies on the one hand, and another body of literature on (testing of) academic competencies on the other.

On general academic competencies, the first phase of the Mastermind Europe project focused more on an analysis of existing standardized tests for general academic competencies than on psychometric literature. The reason for this was exactly the fact that these tests (notably GRE and GMAT) do indeed exist and have accumulated vast experience.

For the domain of personal dimensions, no well-developed tests with a focus on university studies were found and as a consequence, more attention was paid to more general literature on competencies — often in connection with the labour market. Here, we quickly arrive at the HEXACO model of 6 dimensions of human personality.[41] HEXACO builds on the earlier "Big Five" model of human personality traits. Much more can be said about alternative models, about the distinction between personal competencies and personal traits, about competencies for study purposes or for the labour market, and on standard tests or intersubjective mechanisms to assess such personal competencies and traits. This is done in the Guiding Tool Personal Competencies and Traits which is part of the Mastermind Europe project explained below.

When we endeavour to build on both practice elsewhere and findings from research, we can see that there is — at least at first sight — some tension between both. Practice tends to favour a fairly simple demarcation between three categories: substance-related knowledge & skills, general academic competencies, and personal competencies & traits. Research and theory tends to see cognitive and meta-cognitive competencies as a continuum, in which a strict demarcation is at least to some extent problematic. Our project aims to provide practical tools to academic master's directors whose own background will more often be in their own subject area than in the pedagogics and didactics of university education. For that reason, we have decided to stay with the three categories indicated above. These may be a simplification of reality, but this disadvantage is effectively — we hope — countered by the integrative and holistic approach that we propose in the use of admission

[41] Michael C. Ashton et al., "A Six-Factor Structure of Personality-Descriptive Adjectives: Solutions from Psycholexical Studies in Seven Languages," *Journal of Personality and Social Psychology* 86, no. 2 (2004): 356-66.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

criteria from all three categories to answer the key questions in the admission process.

Thus, the Mastermind Europe project aims to develop Guiding Tools to help organize master's admission through competency-assessment with three related sets of competencies:

1. Substance-related knowledge and skills, which the student simply needs to possess to stand a fair chance to succeed in the master's programme and what it prepares for;
2. General academic competencies, with connotations of "academic level", maybe intelligence; sometimes called the "competencies of the mind"; and
3. Personal competencies & traits, with connotations of social skills and motivation; sometimes called "competencies of the stomach" (personal) and "competencies of the heart" (interpersonal).

Such a categorisation — with adequate support in research in social psychology — offers the opportunity to develop a toolkit of instruments for competency-based admission. Key elements here are:

a) Define which criteria are importance for the master's programme
b) Set the minimum — or optimum — benchmark that applicants need to meet
c) Decide on mechanisms to decide if an applicant meets the benchmark in the designated criteria
d) Possibly design mechanisms that allow applicants to remedy deficiencies
e) Construct a process that is transparent to prospective students and allows to monitor validity and predictive value of the chosen criteria and benchmarks
f) Deal with legal, regulatory and cultural obstacles that may inhibit this approach.

In the remainder of the article, a description of the Mastermind Europe project as it set out since September 2014 is given, followed by an analysis of and reflection on the activities and results of the first year of this 3-year project.

VII. **The Mastermind Europe approach**

The categories of criteria and the key elements of a toolkit for competency-based master's admission are the cornerstones of the Mastermind Europe

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

project, which under the ERASMUS+ programme (Key action 2: strategic partnerships) is set to develop and test just such a toolkit, strengthen the evidence base for the paradigm shifts described in this article and disseminate the results with the European Higher Education Area.

Mastermind Europe project

— Guiding Tools for competency-based admission
— Focus Groups with academic master's directors
— Pool of expert advisors
— Surveys to strengthen evidence base

The Mastermind Europe project is implemented from September 2014 to September 2017 by a Consortium of 11 members, directed by the *Vrije Universiteit* (VU University Amsterdam). Universities in the Consortium are the University of Helsinki, the University of Vilnius, the University of Graz, the University of Ljubljana and the Politecnico di Milano. In addition, the German Rectors' Conference and the Association of Catalan Public Universities are umbrella organisation members, as is the Academic Cooperation Association. The Consortium encompasses two private companies: StudyPortals and Ziggurat.

In the course of the three-year project, Mastermind Europe will produce draft and revised **Guiding Tools** to assist master's programmes to design and construct their own coherent competency-based admissions framework, with specific Guiding Tools on the various kinds of admissions criteria, language requirements and tools to organised admission efficiently. The first drafts have been published on the Mastermind Europe website (www.Mastermindeurope.eu) in the Summer of 2015, with further revisions expected in the course of the project.

The set of Guiding Tools will consist of:

a) A general introduction to the paradigm shift (a summary of this article).
b) A sketch of the place of master's admission within a) the chain of contacts between the student and the university from first recruitment to beyond graduation and b) the lifecycle of master's programme development.
c) A guiding Tool focusing on substance-related knowledge and skills.
d) A guiding Tool focusing on general academic competencies.
e) A guiding Tool focusing on personal competencies and traits.
f) A guiding Tool focusing on a coherent admission framework.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

g) A guiding Tool focusing on English language requirements.
h) A guiding Tool on admission software consistent with the competency-based master's admission.

Guiding tools on:

— Substance-Related Knowledge & Skills
— General Academic Competencies
— Personal Competencies & Traits
— Building a Coherent Admission Framework
— Language Requirements & Tests
— Software that accommodates competency-based admission

The project is building up a small **pool of ex**perts in competency-based master's admission, available when universities feel the need for outside guidance and support in their effort to construct a coherent competency-based admission framework.

The draft Guiding Tools and the support by the experts is being tested in a series of regional **Focus Group** meetings, of which the first four (in Barcelona, Helsinki, Amsterdam, and Milano) were held in the course of 2015. A second round of Focus Group meetings will be held in the second half of the project.

To strengthen the evidence base of the project's underlying assumptions, **surveys** are carried out to collect quantitative and qualitative data on rules, criteria, tools and challenges that exist in master's programmes in Europe.

At the end of the project, an international **conference** will be organised to enhance dissemination, which is stimulated throughout the project by means of the Mastermind Europe website (www.Mastermindeurope.eu).

VIII. **One year Mastermind Europe: Analysis and reflection**

VIII.1. *Significant interest*

During the first year of the project, four draft Guiding Tools were published in addition to the Paradigm Shift report as an introduction to the Guiding Tools. Four Focus Group meetings were held to discuss the issue of Master's admission for a diverse international classroom: In Barcelona (April), Helsinki (May), Amsterdam (September), and Milano (December). The average number of participants was considerably higher than expected in

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

the project plan, underlining the interest for the subject among academic master's coordinators in Europe.

This interest was also demonstrated by the large number of unplanned external events at which the notion of master's admission on the basis of assessment of competencies was shared with a wide variety of audiences: there were sessions at EAIE[42] in September 2014 and September 2015, an internal workshop at the *Vrije Universiteit Amsterdam* (Februari 2015), and a workshop in the international Peer Learning Activity on Assessment of Learning Outcomes in the FABOTO[43] in The Hague (October 2015); additional events are planned or foreseen for the first months of 2016 in Ljubljana, Moscow and Belfast. The interest for the new approach to master's admission was not limited to Europe: sessions were held for internationalization leaders and admission professionals in North America, as well as for protagonists of HE reform in Asia and specifically Japan.

In the course of 2015, a survey was conducted among the 1300 English-taught master's programmes in non-English speaking European countries; the survey focused on both facts and perceptions around master's admission. The publication of the analysis is forthcoming, while a second survey has been launched on the experiences of students in the application process.

A website was set up and used to disseminate information on the various events and publish the first 5 draft Guiding Tools.[44]

VIII.2. *Bridging practice and research; developing tools*

Looking back on the first year of the project, it seems clear that there is indeed merit in the efforts to bring together experience and expertise from various sources. In fact, this concerns a) the experience in universities already practicing elements of competency-assessment in admission, b) the concerns and needs of master's programmes confronted with increasing diversity, c) expertise in testing agencies such as ETS, and d) literature on scientific research on the topic. The draft Guiding Tools show the results of the first efforts on this score; more work will need to be done in the context of the Mastermind Europe project and beyond.

---

[42] EAIE: European Association for International Education.

[43] FABOTO: Facilitating the use of Bologna Tools.

[44] These are: A general introduction to the paradigm shift (a summary of this article); a guiding Tool focusing on substance-related knowledge and skills; a guiding Tool focusing on general academic competencies; a guiding Tool focusing on personal competencies and traits, and a guiding Tool focusing on a coherent admission framework.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

The development of the draft Guiding Tools in the first year of the project has been incremental: in the first half year of the project, rough drafts were produced and used at the first 2 Focus Group meetings, in Barcelona and Helsinki. These first rough draft versions were not yet 'tools' to speak of; they were collections and analyses of examples and literature and first attempts to structure these. On the basis of the first 2 Focus Group meetings — and considerable additional work by the experts — publishable draft Guiding Tools were developed which already contained some elements of tools: check lists, steps' sequences, question lists; the third Focus Group meeting in Amsterdam clearly showed the added value of these tools. But this development is not completed. There is still substantial work to be done to further develop the tools' character of the documents; this will need to be achieved in a re-iterative process between experts and users.

Part of the challenge in the creation of these tools is to reconcile the seemingly contradictory requirements of usability in very specific context (e.g. of study and country) and general usability and comparability across the wide variety of masters' programmes in Europe.

One particularly interesting finding has been that of the logical-abstract dimension of General Academic Competency, covered by the IE admissions test.[45]

VIII.3. *Common framework with Tuning and European Qualifications Frameworks*

In the original Paradigm Shift report (see § 5 above), Mastermind Europe's competency-assessment based approach to master's admission was placed somewhat in juxtaposition to the efforts to reach consensus on — and automatic recognition of — exit competencies. During the first year of the project, it has been increasingly clear that although this position may still be defensible in what regards to tools for admission to master's programs, there is no real tension between the approaches at the conceptual level: both the efforts aimed at Learning Outcomes, and at Automatic Recognition, and at a competency-assessment based approach to admission requirements for master's admission, work towards the same common framework of concepts and terminology for the purposes and processes in higher education.

---

[45] Formerly called "diagrammatical" by IE itself; now they refer to logical-abstract reasoning as the addition to the verbal and numerical comprehension and reason; see http://www.ie.edu/iegat-masters-admission-test/

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

This can be clarified by looking at the example of the definition of Learning Outcomes. As quoted in § 2 above, the ECTS User Guide gives the following definition of Learning Outcomes: Learning outcomes are statements of what a student is expected to know, understand and/or be able to demonstrate after completion of a process of learning.

In the Mastermind Europe project, it is now considered to offer a parallel definition of Admission Requirements: Admission requirements are statements of what a student is expected to know, understand and/or be able to demonstrate before the beginning of a process of learning.

More generally, it seems worthwhile to bring together terminology elements from projects and initiatives like Tuning, ECTS, EQF, QFHE, Automatic Recognition and the Mastermind Europe project and also the new CAHOLEE project. All these projects and initiatives have produced — and are producing — relevant concepts for knowledge, skills and attitudes and/or substance related knowledge & skills, general academic competencies, and personal competencies and traits.

The fact that they have a different focus on the learning outcomes, design of curricula, and admission requirements for HE programmes only adds to the value of bringing them together in one common framework.

VIII.4. *Tasks and roles, critical thinking*

In developing the draft Guiding Tool for a Coherent Admission Framework, the power of the concept of tasks & roles — briefly mentioned in § 1 introduction — was until now only touched at the surface. The work of Jeroen van Merriënboer[46] deserves a closer scrutiny in the remainder of the project, as does — yet unpublished — work by Daan Andriessen[47] and Robert Coelen.[48] In a similar vein, more work will need to be done to undercover layers and segments of critical thinking & reasoning. This is indeed tested in the GRE and GMAT tests, but may need further refinement to make it more tangible for academics in specific programs. In a recent discussion at the *Vrije Universiteit*, the following concepts were articulated, which deserve further exploration and comparison with literature, i.a. in the context of GRE and GMAT: — (tendency towards) reproduction, —

---

[46] Jeroen van Merriënboer and Paul Kirschner, *Ten steps to complex learning: A systematic approach to four-component instructional design* (Routledge, 2012).

[47] Looking at typical roles & task in post HE professions such as 'advising', 'designing', 'producing', 'acting', and 'researching'.

[48] Looking for 'early career challenging tasks' for recently graduated professionals.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

(strength or weakness of) argumentation, — (shyness ↔ openness to give or receive) criticism, — (strength or weakness of) analysis, — divergence (willingness to think out-of-the box and take unexpected viewpoints), — (strength and weakness in written) presentation, — (ability to think in) analogies, —(ability to use) metaphors, — respect (for other opinions).

VIII.5. *Legal concerns*

The Mastermind Europe project from the start envisaged attention for the role of legal and regulatory obstacles to a competency-assessment approach to master's admission. In the course of the first year, indications were found that perceived regulatory obstructions may be more prevalent than actual obstructions. Furthermore, indications surfaced that there may be two distinct dimensions to the legal & regulatory aspects: one — already foreseen in the project proposal — is that of regulations which explicitly forbid admission on the basis of any other criterion than a recognized degree. Another dimension — not foreseen from the outset — is that admission based on competency-assessment may be seen as contrary to more general principles of equity in admission and may lead to appeals by students who were not admitted.

IX. **Conclusion**

The transition from bachelor's to master's in Europe is changing from a one-on-one transfer from a bachelor's programme to a master's programme into a many-to-many transition:

One-to-one: the vast majority of students continue after their bachelor's degree in the master's degree with which it forms a logical unity: in the same discipline at the same university.

Many-to-many: increasing numbers of students go to another university, maybe in another country, and in a (slightly) different discipline or an interdisciplinary master's programme.

This shifting attitude of students is only one of the trends which change the scenery for master's admission in Europe. There is a trend to focus on learning outcomes of master's programmes in broader terms than academic (scholarly) knowledge and skills; soft skills, meta-cognitive skills, communication skills, competencies. There is a trend towards more converging and generic outcome descriptors: what master's graduates know, can do and are able to understand.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

Key concepts in this perspective are the National and European Qualifications Frameworks, the Tuning Process, and the Dublin Descriptors.

Trends and developments in master's education run parallel with developments in thinking and practice in international recognition of academic degrees. The Lisbon Recognition Convention and its subsidiary texts have added tangible notions on procedures and criteria for (withholding of) recognition to the lofty declarations of good intentions. The idea has become accepted that recognition must/should be granted, unless the host country authorities can demonstrate substantial relevant deficiencies in a foreign degree. "Acceptance" of manageable differences is gaining ground over the prior concept of "Equivalence" in all details or at least in overall value and level. The ENIC/NARIC network — together with the Tuning experts — has set out a trajectory for "Automatic Recognition" to stimulate that such forward-looking recognition practice is wedded to the approach towards generic outcome descriptors and becomes daily practice at the level of universities as well as at the national level.

But even the most optimistic scenario for "automatic recognition" through "acceptance" will not provide an adequate solution to the problems of a) increased and increasing diversity in the offering of master's degrees and b) increased and increasing diversity in the background of applicants, both from within Europe and from other regions of the world.

More and more often, these existing tools are no longer sufficient to decide if an applicant from "outside" is admissible — whether in rights-based admission ("all who are qualified") or in selective admission ("the best of the qualified"). If "outside" applicants are a relatively rare exception among a class of home-grown bachelor's, it may be acceptable to use assumptions like: "Students from high-ranked universities are always better for any master's programme than students from lower-ranked universities" or "The grade or GPA in the bachelor's demonstrates a student's intelligence". But when "outside applicants" become significant minorities or even the majority in class, more transparency and more validity — predictive value — is necessary to keep up both quality & relevance to the post-graduation world and attractiveness to the prospective graduate students.

Increasing numbers of master's programmes in Europe want a diverse classroom, with students from various backgrounds in terms of universities, education systems and sometimes even disciplines. This development changes the key issue when admitting applicants for outside. The question changes from: "Does this student have a bachelor's which in sufficiently identical to our own preceding bachelor's" into "Does this student have what it takes to be successful in our programme?".

Arguably it makes sense to cut this "what it takes" into three categories:

— Subject related knowledge and skills
— General academic competency and potential
— Personal and interpersonal competency and potential.

And the "what it takes" question consists of three parts:

— Which elements (competencies) are deemed essential for a specific master's programme?
— What measurable level is required at admission and how can this be tested/demonstrated?
— How can this assessment of competencies be organised in an admission process that is transparent for potential applicants and allows for monitoring its predictive value and validity over time?

As part of the Mastermind Europe project, a number of Guiding Tools are produced to assist academic master's directors who want to change from "diploma-recognition" based admission to "competency-assessment". The project is developing a toolkit which helps master's coordinators to decide if and to what extent they want to include academic and personal competencies in their admission process.

Guiding Tool 1: "Subject Knowledge and Skills, focuses on substance-related knowledge and skills: if the notion of a full bachelor's in a specific discipline is dropped — for instance for multidisciplinary master's programmes — then what is the minimal knowledge and skill — related to the subject — that students need to command? And how does one organise a process to define these threshold markers with adequate support from academics and university leadership — and without a veto because of laws or regulations?

Guiding tools 2 and 3 focus on General Academic competencies and Personal Competencies & Traits. Guiding Tool 4 focuses on a Coherent Admission Framework that brings together the key questions and specific categories. Guiding Tool 5 focuses on language requirements and tests. Guiding Tool 6 will discuss software programmes available on the market which allow to build in competency-assessment mechanisms into the graduate enrolment process.

The Guiding Tools are being tested in a number of Focus Group meetings with academic master's coordinators from various parts of Europe.

In the remainder of the Mastermind Europe project, the Guiding Tools and other instruments will — as sketched in §7 above — be further developed and improved to assist Master's coordinators who see the need for the

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

transition to admission based on competency-assessment in a valid and transparent framework.

And most importantly, to help applicant students understand what is needed to get admitted, thus helping them to get admitted to suitable master's programmes.

Bibliography

Ashton, Michael C., Kibeom Lee, Marco Perugini, Piotr Szarota, Reinout E. de Vries, Lisa Di Blas, Kathleen Boies, and Boele De Raad. "A Six-Factor Structure of Personality-Descriptive Adjectives: Solutions from Psycholexical Studies in Seven Languages." *Journal of Personality and Social Psychology* 86, no. 2 (2004): 356-66.

Barr, Robert B., and Tagg, John. "From Teaching to Learning. A New Paradigm for Undergraduate Education." *Change. The Magazine for Higher Education* 27, no. 6 (1995): 13-25. Available at: http://www.athens.edu/visitors/QEP/Barr_and_Tagg_article.pdf.

Blomqvist, Carita, Bruin, Lucie de, and Lokhoff, Jenneke. "From Principle to Practice — Towards Fair Recognition in the EHEA." *Journal of the European Higher Education Area*, no. 04 (2012): p.41-64.

BOLOGNA PROCESS Coordination Group for Qualifications Framework. "Report on Qualifications Frameworks." Strasbourg: Council of Europe, 2009. Accessed December 12, 2014. http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/2009_QF_cg_report.pdf.

Bologna Working Group on Qualifications Frameworks. "A Framework of Qualifications of the European Higher Education Area." Copenhagen K: Ministry of Science, Technology and Innovation, Denmark, 2005. Accessed December 12, 2014. http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/050218_QF_EHEA.pdf.

Bruin, Lucie de. Foreword to *A Tuning Guide to Formulating Degree Programme Profiles*, edited by Jenneke Lokhoff, Bas Wegewijs, Katja Durkin, Robert Wagenaar, Julia González, Ann Katherine Isaacs, Luigi F. Donà dalle Rose and Mary Gobbi, 11-12. Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010.

———. "With Both Feet on the Ground: EAR Projects, Instruments for Recognition." In *The Lisbon Recognition Convention at 15: Making Fair Recognition a Reality (Council of Europe Higher Education Series No. 19)*, edited by Sjur Bergan and Carita Blomqvist. Strasbourg: Council of Europe Publishing, 2014: p.207-223.

Council of the European Union. "Council Conclusions on the Global Dimension of European Higher Education." EDUCATION, YOUTH, CULTURE and SPORT meeting, Brussels, 25-26 November 2013. Accessed July 23rd, 2015. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/139717.pdf

Council of Europe. "The Lisbon Recognition Convention [Main Documents]." Council of Europe, accessed February 19th, 2015, http://www.coe.int/t/dg4/highereducation/recognition/lrc_EN.asp.

ECTS Users' Guide 2015: http://ec.europa.eu/education/library/publications/2015/ects-users-guide_en.pdf.

EHEA Pathfinder Group on Automatic Recognition. "Report by the EHEA Pathfinder Group on Automatic Recognition." EHEA, 2014. Available at: http://www.ehea.info/Uploads/SubmitedFiles/12_2014/154205.pdf.

European Higher Education Area [EHEA]. "National Qualifications Frameworks." Accessed December 12, 2014. http://www.ehea.info/article-details.aspx?ArticleId=69.

———. "The Framework of Qualifications for the European Higher Education Area." Accessed December 12, 2014. http://www.ehea.info/Uploads/QF/050520_Framework_qualifications.pdf.

Ewell, Peter T. "The Lumina Degree Qualifications Profile (DQP): Implications for Assessment." Occasional Paper 16. Champaign: National Institute for Learning Outcomes Assessment, 2013.

Helgøya, Ingrid, and Anne Hommea. "Path-Dependent Implementation of the European Qualifications Framework in Education. A Comparison of Norway, Germany and England [Version of Record] ". *Journal of Comparative Policy Analysis: Research and Practice* (2013): 1-16.

Karseth, Berit, and Tone Dyrdal Solbrekke. "Qualifications Frameworks: The Avenue Towards the Convergence of European Higher Education?". *European Journal of Education* 45, no. 4 (2010): 563-76.

Kouwenaar, Kees. "Recognition Instruments in Europe." *Higher Education in Europe* 19, no. 2 (1994): 7-26.

Lokhoff, Jenneke, Bas Wegewijs, Katja Durkin, Robert Wagenaar, Julia González, Ann Katherine Isaacs, Luigi F. Donà dalle Rose, and Mary Gobbi, eds. *A Tuning Guide to Formulating Degree Programme Profiles*. Bilbao, Groningen, and The Hague: Universidad de Deusto, 2010.

Nuffic (Netherlands organisation for international cooperation in higher education). *The European Recognition Manual for Higher Education Institutions*. The Hague: Nuffic, 2014.

Pechar, Hans, and Ada Pellert. "Austrian Universities under Pressure from Bologna." *European Journal of Education* 39, no. 3 (2004): 317-30.

Rychen, Dominique Simone, and Laura Hersh Salganik, eds. *Key Competencies for a Successful Life and a Well-Functioning Society*. Göttingen: Hogrefe and Huber Publishers, 2003.

Tuck, Ron. *An Introductory Guide to National Qualifications Frameworks: Conceptual and Practical Issues for Policy Makers*. France: International Labour Organization [ILO], 2007.

Wagenaar, Robert. "Competences and Learning Outcomes: A Panacea for Understanding the (new) Role of Higher Education?". *Tuning Journal of Higher Education* 1, no. 2 (2014): 279-302.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

About the Author

KEES KOUWENAAR (kees.kouwenaar@vu.nl) has over 30 years of experience in internationalisation and international cooperation in higher education. He is senior advisor international strategy at the Vrije Universiteit in Amsterdam (VUA), the Netherlands. At the Vrije Universiteit he served before as Strategic Programme manager Internationalisation and as director of the Centre for International Cooperation. Before moving to the VUA in 2008, he served as director of CILC (Centre for International Legal Cooperation), an NGO in legal and judicial development cooperation from 2002. He started his career in 1982 at Nuffic (the Netherlands organisation for International Cooperation in HE). At Nuffic, he worked as expert and director of NARIC-NEIC and served internationally as president of the NARIC network, chair of the EAIE professional sector for Admission and Credential Evaluation, and as key expert for the Lisbon Recognition Convention. His key areas of expertise are in international recognition of qualification, internationalisation of learning outcomes, comprehensive internationalisation strategy and practice, internationalisation of research, and capacity development in HE institutions. He has published on recognition, capacity development in HE and on strategies for internationalisation of HE. Kees Kouwenaar holds a 'doctorandus' degree in History from the Vrije Universiteit (comparable to BA + MA in History).

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 99-135
doi: 10.18543/tjhe-3(1)-2015pp99-135 • http://www.tuningjournal.org/

A 21st Century Imperative: Integrating Intercultural Competence in Tuning

Darla K. Deardorff*

doi: 10.18543/tjhe-3(1)-2015pp137-147

Abstract: Given the increasing demand for interculturally competent graduates and employees, it is incumbent upon the Tuning community to incorporate intercultural competence into Tuning Frameworks. With the growing diversity in the world today, beyond national diversity, intercultural competence cuts across disciplines, subjects, and contexts. This essay highlights the first research-based definition and framework of intercultural competence which can be translated into any subject and context and makes the case for why intercultural competence must be embedded into Tuning Frameworks around the world.

Keywords: intercultural competence; global competence; workplace; Delphi; diversity.

The 21st century workplace is one filled with diversity — with workers of different ages, different religions, different genders, different cultures, with different beliefs, ways of thinking, abilities, ways of communicating, and so much more. Many jobs today, regardless of location, require working with other people who are quite different from each other. While technical knowledge and subject knowledge are certainly important for success, they are not enough. What else is needed to be successful in working with people across difference, regardless of the subject area? Employers increasingly indicate the importance of employees' intercultural skills and the ability to work successfully on diverse teams.[1] Intercultural competence (and a plethora of other terms, depending on the discipline and subject) becomes the

* Dr. Darla K. Deardorff (d.deardorff@duke.edu) is a research scholar at Duke University (USA). She is also executive director of the Association of International Education Administrators (AIEA).

[1] Martin Tillman, "Employer Perspectives on International Education," in *The Sage Handbook of International Higher Education*, ed. by Darla K. Deardorff, Hans de Wit and John D. Heyl (Thousand Oaks, CA: Sage, 2012); British Council, "Culture at Work: The Value of Intercultural Skills in the Workplace" (London: British Council, 2013).

way forward and it is crucial that the Tuning community intentionally include intercultural competence as a critical piece of what today's graduates need to know and be able to do, regardless of discipline. As the British Council report "Culture at Work" noted, "Communicating with customers, colleagues and partners across international borders is now an everyday occurrence for many workers around the world. Consequently, employers are under strong pressure to find employees who are not only technically proficient, but also culturally astute and able to thrive in a global work environment".[2]

Various disciplines and subjects are beginning to address the importance of intercultural competence through inclusion in accrediting standards. For example, in the United States, the following professional disciplines include intercultural, or global, competence in their accrediting standards: engineering, education, nursing, social work, medicine, and business to name a few. There are many examples of professionals working with those from different backgrounds. For instance, scientists regularly work with others from other cultures (examples include CERN, Square Kilometer Array (SKA), and European Synchrotron Radiation Facility). Within these varied and different contexts, it becomes crucial to consider what intercultural competences are needed to work successfully in teams, with clients, partners, co-workers and on projects.

Intercultural competence is increasingly gaining prominence in a variety of sectors around the world. Just as higher education is noting its importance,[3] so are regional and world organizations such as the Council of Europe[4] and the United Nations,[5] as not only key to employability but also to democracy and a more peaceful world.

Given the increasing recognition of the importance of intercultural competence, the question becomes: When will the Tuning community integrate intercultural competence *intentionally* and *specifically* in existing frameworks? While some of the generic competences developed through the Tuning Project relate tangentially to intercultural competence (see Figure 1), Tuning does not overtly and intentionally address intercultural competence either in the generic or specific competences. Integration of intercultural competence may include adapting already noted competences (such as the

---

[2] British Council, "Culture at Work," 3.

[3] Eva Egron-Polak and Ross Hudson, *Internationalization of Higher Education: Growing Expectations, Fundamental Values* (Paris: International Association of Universities, 2014).

[4] Council of Europe, *Developing Intercultural Competence in Education* (Strasbourg: Council of Europe, 2014).

[5] UNESCO, *Intercultural Competences* (Paris: UNESCO, 2013).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

ones in Figure 1) as well as including specific aspects of intercultural competence (see figure 2) contextualized to subject areas.

- Ability to communicate in a second language
- Ability to show awareness of equal opportunities and gender issues
- Ability to search for, process and analyze information from a variety of sources
- Ability to work in a team
- Ability to work in an international context
- Interpersonal and interaction skills
- Ability to act with social responsibility and civic awareness
- Appreciation of and respect for diversity and multiculturality
- Skills in the use of information and communications technologies
- Ability to adapt to and act in new situations
- Understanding of cultures and customs of other countries

Figure 1

Some generic Tuning competences related to intercultural competence

I. Existing Myths

An important task to be addressed before moving to a definition of intercultural competence is the debunking of certain myths which exist within academia about the concept. There are numerous myths around intercultural competence development including ones such as the following:

Myth #1: "International experience equates with intercultural competence."
Myth #2: "Intercultural competence comes naturally and can't be taught."
Myth #3: "Intercultural competence is not that important in my discipline."
Myth #4: "Fluently speaking another language means the person is interculturally competent."
Myth #5: "Intercultural competence cannot be assessed."

These are all myths that higher education institutions can and are addressing through the curriculum and beyond. For example, intercultural competence can indeed by addressed through the curriculum,[6] and intercultural competence is assessable as in concrete learning outcomes,

[6] Kate Berardo and Darla K. Deardorff, *Building Cultural Competence: Innovative Activities and Models* (Sterling, VA: Stylus, 2012); Betty Leask, *Internationalizing the Curriculum* (New York: Routledge, 2015).

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

using a multi-method, multi-perspective approach.[7] Further, it is important to recognize that intercultural competence goes beyond language and beyond knowledge about other cultures — and to recognize that skills and attitudes are equally important to the development of intercultural competence. To that end, it is encouraging to note that numerous generic Tuning competences listed in Figure 1 do indeed address skills. The Tuning community needs to address these and other myths by intentionally incorporating intercultural competence and related aspects into its discourse and work.

II. **Terminology**

There are many terms used to describe this concept of intercultural competence: international competence, global citizenship, intercultural effectiveness, cultural intelligence, cross-cultural competence, and intercultural sensitivity to name just a few. Terms are specific to each discipline; for example, in the United States, engineering often uses "global competence" while the healthcare professions may use "cultural competence" (referring more to domestic diversity). Business may use a term such as "cultural intelligence" or "cross-cultural effectiveness" while in education, there are a wide variety of terms used including both "global competence" and "intercultural competence" as well as "global citizenship" and "global learning." While there may not need to be consensus on terminology, it is important to recognize that there are indeed many different terms used for the same concept, and regardless the terminology, it is vital to understand how terms are defined, which frameworks are being used, and how these terms are translated into practice in the respective disciplines and subjects so that the academy moves beyond ambiguous, frequently used and lofty terms to substantive, meaningful practice. For the purposes of this paper, the term "intercultural competence" will be used given its prevalence in higher education[8] as well as in numerous contexts around the world. Further,

---

[7] Michael Byram, *Teaching and Assessing Intercultural Communicative Competence* (Clevedon: Multilingual Matters, 1997); Doug Stuart, "Assessment Instruments for the Global Workforce," in *Contemporary Leadership and Intercultural Competence*, ed. by Michael A. Moodian (Thousand Oaks, CA: Sage, 2008); Alvino Fantini, "Assessing Intercultural Competence: Issues and Tools," in *The Sage Handbook of Intercultural Competence*, ed. by Darla K. Deardorff (Thousand Oaks, CA: Sage, 2009); Darla K. Deardorff, *Demystifying Outcomes Assessment for International Educators: A Practical Approach* (Sterling, VA: Stylus, 2015).

[8] Deardorff, *Demystifying Outcomes Assessment for International Educators.*

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

intercultural competence (in contrast to cross-cultural competence, international competence, multicultural competence, etc.) implies i*nteraction* between those from different backgrounds, whether within a society or cross-border.

III. **Research-based Definition of Intercultural Competence (ICC)**

What is intercultural competence? There has been over fifty years of scholarly effort in defining this concept,[9] primarily in the United States and in Europe. The first research-based definition of intercultural competence[10] used a Delphi methodology, which is an iterative process with an identified group of experts, to develop a grounded-research framework that specified the agreed-upon essential elements of intercultural competence —categorized under knowledge, skills, and attitudes, as well as internal and external outcomes and highlighted here (see figure 2 for details):

Attitudes: Three key attitudes emerged as part of the consensus documented in the Deardorff study: respect, openness, and curiosity/ discovery. Respect for others involves demonstrating that they are valued, including through showing interest in them and listening attentively to them. Respect is especially important to extend to those whose beliefs and values may differ from one's own. Openness and curiosity both imply a willingness to risk and to move beyond one's comfort zone. These three attitudes are foundational to the further development of the knowledge and skills needed for intercultural competence. One way to move individuals toward these requisite attitudes is by challenging their assumptions about their own views of the world and the ways in which they perceive others. This challenging of assumptions can be done through the curriculum, and especially through experiential learning opportunities in which learners engage actively with those in the local community.

Knowledge: Intercultural scholars in this study concurred on the following broad categories of knowledge: cultural self-awareness (meaning the ways in which one's culture has influenced one's identity and worldview), culture-specific knowledge, deep cultural knowledge (including understanding other worldviews), and sociolinguistic awareness. It is

---

[9] Brian Spitzberg and Gabrielle Changnon, "Conceptualizing Intercultural Competence," in *The Sage Handbook of Intercultural Competence*, ed. by Darla K. Deardorff (Thousand Oaks, CA: Sage, 2009).

[10] Darla K. Deardorff, "The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States," *Journal of Studies in International Education* 10, no. 3 (2006): 241-66.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

important to note that for purposes of this discussion, "culture" is defined as values, beliefs, and norms held by a group of people, which shapes how individuals communicate and behave, that is, how they interact with others. Culture does not necessarily mean only those from different national or ethnic backgrounds, but also those from other diverse groups (religious, socio-economic, gender, sexual orientation, regional) within a particular society. The one element agreed upon by all the intercultural scholars in the study was the importance of understanding the world from others' perspectives. This last piece has significant implications for higher education: How do different subjects and disciplines incorporate others' perspectives and intercultural experiences into their curriculum and programmes?

Skills: The skills documented in this study as part of the consensus understanding of intercultural competence address the *processing* of knowledge: observing, listening, evaluating, analyzing, interpreting, and relating. This concurs with an observation by the former president of Harvard University regarding the importance of "thinking interculturally".[11] Given these skills, critical self-reflection is essential to the development and assessment of intercultural competence.

Internal Outcomes: These attitudes, knowledge, and skills ideally lead to internal outcomes that consist of flexibility, adaptability, an ethno-relative perspective, and empathy, with the latter emerging as a key research area of intercultural competence. These are outcomes that occur within the individual as a result of the acquired attitudes, knowledge, and skills necessary for intercultural competence. If these internal outcomes are achieved, individuals are able to see from others' perspectives and to respond according to the way in which the other person desires to be treated. Individuals may reach this outcome to varying degrees of success based on the amount of intercultural knowledge and skills acquired.

External Outcomes: The summation of the attitudes, knowledge, and skills, as well as the internal outcomes, are demonstrated through the visible behavior and communication of the individual in an intercultural situation. How effective and appropriate is the individual involving engaging with diverse others in intercultural interactions? This, then, becomes the agreed upon definition of intercultural scholars, that intercultural competence is the *effective* and *appropriate* behavior and communication in intercultural situations, with e*ffectiveness* being determined by the individual and the *appropriateness* being determined by the other person(s) in the interaction. Effectiveness (the degree to which one achieves one's goals) is only half the intercultural equation with

[11] Derek Bok, *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More* (Princeton: Princeton University Press, 2006).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

appropriateness being the other half. It is important to understand that this definition is predicated on particular requisite elements of knowledge, skills, and attitudes as agreed upon by experts in this study as outlined here.

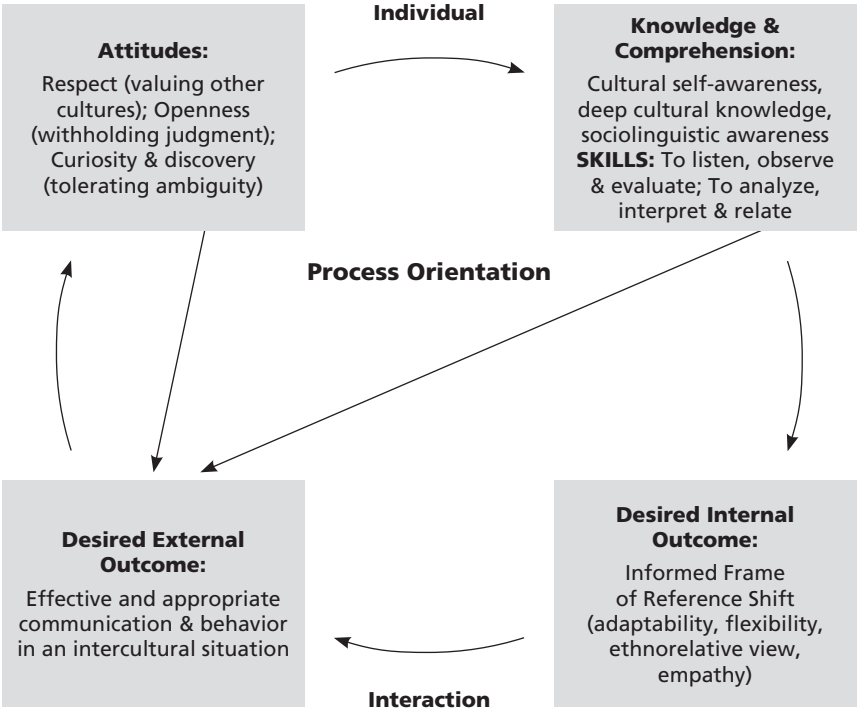

Figure 2

Process Model of Intercultural Competence.[12]

IV. **Discussion of ICC Framework**

Given that the items within each of these dimensions are still broad, each aspect can be developed into more specific measurable outcomes and

[12] Deardorff, "The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States," *Journal of Studies in International Education* 10, no. 3 (2006): 241-66; Deardorff, *The Sage Handbook of Intercultural Competence* (Thousand Oaks, CA: Sage Publications, 2009).

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

corresponding indicators depending on the subject and context. Note that the overall external outcome of intercultural competence is defined as the *effective* and *appropriate* behavior and communication in intercultural situations, which again can be further detailed in terms of indicators of appropriate behavior (as viewed by the other) in specific contexts, from engineering to health care.

There are several key points to consider in this grounded-theory based model that have implications for the Tuning community. First, intercultural competence development is an ongoing process and thus it becomes important for individuals to be provided with opportunities to reflect upon and assess the development of their own intercultural competence over time. In addition, this suggests assessment should be integrated throughout targeted interventions.

Second, critical thinking skills play a crucial role (see the Skills module in Figure 1) in an individual's ability to acquire and evaluate knowledge. This means that critical thinking assessment could also be an appropriate part of intercultural competence assessment.

Third, attitudes—particularly respect (which is manifested differently in cultures), openness, and curiosity—serve as the basis of this model and impact all other aspects of intercultural competence. Addressing attitudinal assessment, then, becomes an important consideration.

Fourth, knowledge alone is not sufficient for intercultural competence development and as Bok (2006) indicated, developing skills for thinking interculturally becomes more important than actual knowledge acquired. How will subjects go beyond knowledge in developing interculturally competent skills?

Fifth, there was only one aspect agreed upon by all the intercultural experts in this study and that was the ability to see from others' perspectives. As a result, addressing intercultural perspectives (of even how a subject is taught in different ways around the world, such as mathematics) within the subject area and the ability to understand other worldviews becomes an important consideration. Further, it becomes important to consider other cultural perspectives and definitions for intercultural competence. For example, from a South African perspective, the concept of *Ubuntu* (African humanism) emerges as a key element of intercultural competence. Other cultures also may focus more on relationships,[13] than on the individual. What

[13] Guo-ming Chen and Ran An, "A Chinese Model of Intercultural Leadership Competence," in *The Sage Handbook of Intercultural Competence*, ed. by Darla K. Deardorff (Thousand Oaks, CA: Sage, 2009); Ranjini Manian and Shobha Naidu, "India: A Cross-Cultural Overview of Intercultural Competence," in *The Sage Handbook of Intercultural Competence*, ed. by Darla K. Deardorff (Thousand Oaks, CA: Sage, 2009); Peter Nwosu,

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

definition(s) of intercultural competence will be used in each subject area and region around the world? Upon what will this definition be based?

V. **Translating Intercultural Competence into Different Subjects**

There is much work to be done on intercultural competence — in taking a general framework, such as the one discussed in this paper, and translating the elements into the subjects and disciplinary contexts. Despite the common basis of intercultural competence elements, an interculturally competent engineer will look different than an interculturally competent health care professional, for example. Here are some questions for the Tuning community and researchers to explore further by discipline and subject, based on the intercultural competence framework discussed in this paper:

1. How does respect, open-mindedness (including non-judgmentalness) and curiosity translate concretely into the discipline?
2. Where is cultural self-awareness addressed in the discipline?
3. Do students recognize the ways in which they view the world, issues, and solutions as culturally bound and can students clearly articulate the multiple ways in which others view these same issues?
4. How does knowledge of different populations (age, gender, culture, religion, indigenous beliefs, etc) in the disciplinary context get taught and from whose perspective?
5. Are the historical/social/economic/political/religious contexts of different populations included in the curriculum when appropriate?
6. Do the disciplinary materials reflect different perspectives?
7. How are communication styles being addressed in the disciplinary context?
8. Are students able to reflect regularly and intentionally on the process of developing their intercultural competence and do they recognize the lifelong nature of developing such competence?
9. Are students able to display empathy and humility in approaching others?

"Understanding Africans' conceptualizations of Intercultural Competence," in *The Sage Handbook of Intercultural Competence*, ed. by Darla K. Deardorff (Thousand Oaks, CA: Sage, 2009); UNESCO, *Intercultural Competences* (Paris: UNESCO, 2013).

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

10. Can students communicate and behave both appropriately and effectively with those from different backgrounds? When working in groups and teams?

These are just a few of the many questions that can be generated from the intercultural competence framework discussed in this paper. Addressing intercultural competence in intentional ways in the Tuning community is the next step in ensuring that graduates are ready for the diverse world of the 21st century.

Bibliography

Berardo, Kate, and Darla K. Deardorff. *Building Cultural Competence: Innovative Activities and Models*. Sterling, VA: Stylus, 2012.

Bok, Derek. *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More*. Princeton: Princeton University Press, 2006.

British Council. "Culture at Work: The Value of Intercultural Skills in the Workplace." London: British Council, 2013.

Byram, Michael. *Teaching and Assessing Intercultural Communicative Competence*. Clevedon: Multilingual Matters, 1997.

Chen, Guo-ming, and Ran An. "A Chinese Model of Intercultural Leadership Competence." In *The Sage Handbook of Intercultural Competence*, edited by Darla K. Deardorff, 196-208. Thousand Oaks, CA: Sage, 2009.

Council of Europe. *Developing Intercultural Competence in Education*. Strasbourg: Council of Europe, 2014.

Deardorff, Darla K. *Demystifying Outcomes Assessment for International Educators: A Practical Approach*. Sterling, VA: Stylus, 2015.

———. "The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States." *Journal of Studies in International Education* 10, no. 3 (2006): 241-66.

———. *The Sage Handbook of Intercultural Competence*. Thousand Oaks, CA: Sage Publications, 2009.

Egron-Polak, Eva, and Ross Hudson. *Internationalization of Higher Education: Growing Expectations, Fundamental Values*. Paris: International Association of Universities, 2014.

Fantini, Alvino. "Assessing Intercultural Competence: Issues and Tools." In *The Sage Handbook of Intercultural Competence*, edited by Darla K. Deardorff, 456-76. Thousand Oaks, CA: Sage, 2009.

Leask, Betty. *Internationalizing the Curriculum*. New York: Routledge, 2015.

Manian, Ranjini, and Shobha Naidu. "India: A Cross-Cultural Overview of Intercultural Competence." In *The Sage Handbook of Intercultural Competence*, edited by Darla K. Deardorff, 233-48. Thousand Oaks, CA: Sage, 2009.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

Nwosu, Peter. "Understanding Africans'conceptualizations of Intercultural Competence." In *The Sage Handbook of Intercultural Competence*, edited by Darla K. Deardorff, 158-78. Thousand Oaks, CA: Sage, 2009.

Pottinger, Paul. *Competence Assessment: Comments on Current Practices. Defining and Measuring Competence*. San Francisco: Jossey-Bass, 1979.

Spitzberg, Brian, and Gabrielle Changnon. "Conceptualizing Intercultural Competence." In *The Sage Handbook of Intercultural Competence*, edited by Darla K. Deardorff, 1-52. Thousand Oaks, CA: Sage, 2009.

Stuart, Doug. "Assessment Instruments for the Global Workforce." In *Contemporary Leadership and Intercultural Competence*, edited by Michael A. Moodian, 175-89. Thousand Oaks, CA: Sage, 2008.

Tillman, Martin. "Employer Perspectives on International Education." In *The Sage Handbook of International Higher Education*, edited by Darla K. Deardorff, Hans de Wit and John D. Heyl, 191-206. Thousand Oaks, CA: Sage, 2012.

UNESCO. *Intercultural Competences*. Paris: UNESCO, 2013.

About the Author

DARLA K. DEARDORFF (d.deardorff@duke.edu), PhD, is a research scholar at Duke University (U.S.A). She is also executive director of the Association of International Education Administrators (AIEA) and holds faculty posts at other institutions including Nelson Mandela Metropolitan University (S. Africa), Meiji University (Japan), and Shanghai International Studies University (China). She received her doctorate from North Carolina State University and her principle fields of research include intercultural competence development and assessment, internationalization, teacher education, and global leadership. She serves as a consultant and advisor on these topics to numerous organizations and universities around the world and is regularly invited to speak on related topics. She is author/editor of numerous publications including five books, some of which are *The Sage Handbook of Intercultural Competence* (Sage, 2009), *Building Cultural Competence* (Stylus, 2012), and *Demystifying Outcomes Assessment for International Educators* (Stylus, 2015).

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 137-147
doi: 10.18543/tjhe-3(1)-2015pp137-147 • http://www.tuningjournal.org/

Competencies, Learning Outcomes and Forms of Assessment: the Use of Tuning Methodology in Russia

Artur Demchuk, Yevgeniya Karavaeva, Yelena Kovtun, and Svetlana Rodionova*

doi: 10.18543/tjhe-3(1)-2015pp149-185

Abstract: The article is focused on the correlation of competencies, learning outcomes and the methods of their assessment in the course of current, interim (end-of-module) and final assessment. It provides a general idea of the background and difficulties associated with the use of competence based learning in the Russian context. We propose an algorithm developed by the experts of Association of Classical Universities of Russia based on the methodology of the Tuning Educational Structures in Europe (TUNING) international project with special emphasis on assessing achievement of learning outcomes. By way of illustration, the undergraduate programmes in Philology and Psychology are discussed.

Keywords: Competencies; learning outcomes; assessment of learning outcomes; Tuning methodology.

I. **Problem overview**

I.1. *Integration of Russia in the European Higher Education Area*

Russia's higher education is being integrated into the global learning environment. This process is a major feature underlying the development of Russia's academic community. In 2003, Russia signed the Bologna Declaration and joined the efforts to create a common educational space in Europe. The cornerstones of this space include mobility, transparency,

* **Artur Demchuk** (arthur@leadnet.ru), Associate professor, Lomonossov Moscow State University (Russia). **Yevgeniya Karavaeva** (karavaeva@rector.msu.ru), Deputy Vice-Rector of Lomonossov Moscow State University (Russia). **Yelena Kovtun** (kovelen@mail.ru), Deputy Dean of the Faculty of Philology, Lomonossov Moscow State University (Russia). **Svetlana Rodionova** (rse14@mail.ru) is Associate Professor of the Chair for Contemporary Russian Linguistics, Bashkir State University (Ufa).

university-business cooperation, and adjustment of educational models to students' needs.

The recent decade saw Russia adopt a multi-level system of higher education. There emerge the links between employers and universities. Furthermore, the professional standards are introduced. The European experience have influenced both the new Federal Law 'On Education in the Russian Federation' and the new generation of federal educational standards. The new standards employ the competency-based approach which requires institutions of higher education to clearly define the professional activities the graduates are fit for, their personal qualities, and potential employment areas.

The federal standards prompt universities to create a new design of educational programmes comparable to that in Europe. The underlying approach here is based on the methodology of the Tuning Educational Structures in Europe project (Tuning). The approach was tailored to Russia's conditions within the Tuning Russia international initiative (2010-2013).[1]

The Tuning Russia project developed methods to redesign Russia's educational programmes in the credit/module fashion. The regulatory framework of Russia's education was also analysed in terms of its compliance with the Bologna principles.[2] The analysis was carried out within two projects: Tuning Russia and 'Expert and analytical support of enhancing the quality of educational programmes of primary, secondary and higher education based on the efficiency monitoring of introducing federal educational standards in regional systems of vocational and higher education'.[3]

The concept of 'competency' is, in itself, a significant challenge to implementing the Tuning methods in Russia. The definition of 'competency' in the country's regulatory framework is somewhat blurred, while the academic community lacks thorough understanding of how the competencies are shaped in the learning process. Moreover, there is uncertainty as to how we can assess whether the competencies have been actually developed by the students and to what extent. Specifically, a 'competency' is largely a term from employers' world. That is, it describes a graduate's professional activity after degree. Therefore, it is complicated to link the competencies

---

[1] The Tuning Russia, http://www.tuningrussia.org

[2] See: E.N. Kovtun and E.V. Karavaeva, "Adapting the Tuning Programme Profiles to the Needs of Russian Higher Education," *Tuning Journal for Higher Education*, no. 1 (November 2013): 187-202, http://www.tuningjournal.org

[3] State Contract No. 12.P20.11.0019 of 28 October 2011, the grant recipient (2011-2013) – the Association of Classical Universities of Russia, http://www.acur.msu.ru/monitoring.php

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

listed in federal educational standards to particular components of a degree programme's curriculum.

By way of illustration, let us consider a set of professional competencies related to creating, analysing and disseminating various types of texts. The example is taken from the federal educational standards on an undergraduate philology degree.[4] In Russia's universities, philological faculties have hardly any learning activities directly linked to this kind of competencies. Does it follow that their curricula do not allow students to develop these competences? The answer is certainly negative, because philology graduates have a long record of landing jobs in such spheres as mass media, advertising, and public relations, not to mention research and teaching positions. Remarkably, these are activities directly linked to creation and processing of various types of texts.

The challenge here consists in the competencies being shaped gradually in a number of stages: separate academic subjects (or sets of subjects), internships, student research, and other learning activities. This implies that the development of the competencies set forth in federal standards can be assessed only at the point of degree ('final assessment').

Therefore, the current (within subjects) and interim (end-of-subject/module) assessment of competencies presents the greatest problem in terms of monitoring student performance. In the example above, a philology student is not really focused on producing texts of various genres or styles. In essence, all of the texts he/she writes are research papers: reports, articles, term papers, and a thesis. Rather, a philology student attends lectures, gets prepared for seminars, and takes tests and examinations: by doing so, he/she demonstrates the acquired body of knowledge and skills. That is why institutions of higher education, while transferring to the competency-based model, often fail to heed the calls to alter their assessment activities in order to comply with this model. With regard to examinations in fundamental subjects, it turned out nearly impossible to 'relate assessment activities to the future professional requirements' (which is a cornerstone of this approach). For philology students, such subjects include the grammar of the languages they study or the history of Russian and foreign literature.

---

[4] The detailed description of the competencies is as follows: 'mastery of the basic skills in creating various types of texts using standard techniques and effective rules (PC-12); mastery of the basic skills of processing and post-processing (e.g., proofreading, editing, annotating, abstracting, lexicographic description) of various types of texts (PC-13); mastery of translation skills with regards to various types of texts (mainly scientific/journalistic texts as well as official documents) from and into foreign languages; annotating and abstracting of documents, research papers and fiction works in foreign languages (PC-14),' http://www.edu.ru/db-mon/mo/Data/d_10/prm34-1.pdf).

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

I.2. *Using TUNING methodology in Russia*

In other words, the competency-based model contained in federal standards and university's degree programmes does contradict the syllabi of individual subjects. Meanwhile, the list of these subjects cannot be abandoned without ruining the entire learning content. The TUNING methodology can prove incredibly helpful in resolving this kind of predicament. It allows to use competencies in order to draw up the learning outcomes which, in contrast to competencies, can be effectively monitored during both current and end-of-subject/module assessment. In this context, the learning outcomes are treated as those parts of competencies that correspond to particular curriculum components (subjects, internships, research work, self-study, etc.).

This methodology is being gradually incorporated in Russia's regulatory framework governing higher education. The 'competencies' and 'learning outcomes' were for the first time clearly distinguished in 2013, when 'The procedure for organising learning activities on undergraduate, specialist-degree, and master's programmes' was adopted.[5] The paper sets forth that a degree programme specification shall include 1. the students' competencies viewed as 'the intended results upon completion of a degree programme' *in general*, and 2. 'the intended learning outcomes for *each particular subject (module) or internship* — that is, the body of knowledge, skills, abilities and/or practical experience characterizing different stages of competencies development and ensuring achievement of the intended results upon completion of a degree programme'. The same idea is contained in another section specifying the structure of subject, module or internship syllabi: 'A subject (or module) syllabus shall include a list of learning outcomes for this subject (module) linked to the intended results upon completion of a degree programme.'

This approach allows various types of current and interim assessment to remain an effective tool of monitoring the learning outcomes (and, eventually, competencies) developed by the students. In this context, both traditional (classical examinations assessing knowledge) and more innovative (tests, projects, portfolio, etc.) assessment activities will become, or simply continue to be, understandable to all participants of the learning process.

---

[5] Decree of Ministry of Education and Science of Russian Federation No. 1367 of 19 December 2013 "*On Approval of the Procedure of Organization and Implementation of Learning Activity of Higher Education Programs – Bachelor, Specialist and Master Degree Programs*".

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

The difference between 'competencies' and 'learning outcomes' also underlies the principles of interim assessment (examinations and pass/fail tests) and assessment at the point of degree (final examinations, thesis defence). In other words, the interim and, to a certain extent, final assessment activities do not monitor the achievement of competencies as such, the competencies being a very broad and comprehensive notion. Rather, they are focused on more specific learning outcomes that do correspond to competencies but are also linked to certain parts of the curriculum.

For two years, the Association of Classical Universities of Russia (the ACUR) have developed methodology guidelines based on the TUNING materials and aimed to assist institutions of higher education in mastering this approach. The ACUR also designed a number of templates, including the so-called Competency Maps and Subject Syllabus. These expert-driven efforts were thoroughly discussed in 2014-2015 at meetings and consultations with officials of Russia's Ministry of Education and Science, employers, and representatives of the academic community. Below in this paper, we discuss the ACUR's major recommendations and provide examples of completing the templates.

II. **Competencies and learning outcomes: Ensuring correlation**

II.1. *Decomposition of competencies*

In order to deliver a degree programme, an educational institution shall define the following:

- what measurable learning outcomes comprise a particular generic or professional (subject-specific) competency;
- what educational technology (subjects, modules, internships) ensures the achievement of these learning outcomes by the students;
- what are the best forms and methods to assess the learning outcomes achieved;
- what are the criteria and grading scales used to assess the learning outcomes.

The first task requires to identify the main components of a competency — that is, to single out the body of knowledge, abilities and skills which will eventually form this competency. In other words, the educators developing a degree programme as well as subject, module or internship syllabi should

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

break down the competency in smaller items. The process includes the following steps:

Step 1. Breakdown in 'mastery' items. To have a 'mastery' means to comprehensively apply (make use of) the acquired knowledge, abilities, and skills for solving complex tasks, including in non-typical circumstances.

Step 2. Breakdown of 'mastery' into 'abilities' and 'skills' (where necessary). 'An ability' implies solution of typical tasks based on standard solution algorithms. 'A skill' is an ability perfected to an automatic action.

Step 3. Defining the necessary and sufficient scope of theoretical and applied knowledge required to build the abilities, skills, and mastery isolated at the previous steps.

This procedure implies that the competencies are decomposed in a top-down fashion (from mastery to abilities and then to knowledge). Conversely, a student develops competencies in a bottom-up manner (from knowledge to ability and then to mastery). That is why the Competency Map presents learning outcomes in reverse order — that is, from knowledge to mastery.

II.2. *Singling out degrees of proficiency*

When breaking down a competency, we can single out several degrees of proficiency. The ACUR recommends that the number of degrees should not exceed three. They can be designated as 'threshold (minimal)', 'intermediate', and 'advanced'. There are various ways to distinguish such degrees.

As a rule, multiple degrees of proficiency are singled out in complex and multilevel competencies that are developed by the students at different stages of a degree programme or at different education levels. In this paper, we provide a map of a generic language/communicative competence for three levels of education (undergraduate, master's, doctoral). It is a good example of an all-embracing multilevel competence. In this map, three degrees of proficiency correspond to three levels of higher education.

In other cases, the degrees can be singled out depending on the following:

— A degree programme's profile / field of study; below we provide a decomposition of the professional competence *PC*-9 of an undergraduate programme in the 'Philology' field of study: 'possession of the basic skills in processing and post-processing (e.g., proofreading,

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

editing, annotating, abstracting, lexicographic description) of various types of texts'.
— Type of a degree programme: academic or applied (applied programmes provide for development of applied professional competencies at a higher level).
— Particular type of professional activity (an intermediate or/and advanced level of proficiency is attained by a student majoring in a certain field; while a threshold level are attained by those who have this field as their minor).

Certainly, programme developers should clearly specify the degree of proficiency required with respect to each multilevel competence obtained on this programme.

II.3. *Structure of a competency map*

A competency decomposition results in a competency map. The map has a number of mandatory sections. The '*Competency Overview*' section includes the following details:

— The competency's code and name.
— The type of competency (generic, general professional, professional, or specialized professional).
— The description of the competency's links to other competencies or the substantiation of the need to acquire competencies in certain order (where applicable).
— The description of the required entry level of knowledge, abilities and practical experience needed to develop the competency (where necessary).
— A reference to a professional standard (if available) and job functions contained therein (and/or job functions related to the competency under consideration).
— Further directions and comments of the competency map developers (where necessary).

The '*Intended learning outcomes characterizing the stages of competency development and their assessment criteria*' section contains the following:

— The description of proficiency degrees for the competency (where necessary).

— The description of the intended learning outcomes (mastery, abilities, knowledge) and their codes for each degree of proficiency.
— The grading scale for learning outcomes with assessment criteria.

III. **Examples of competency maps**

Below in this paper we demonstrate how the approach of TUNING and the ACUR can be put to practice. We provide an example of formulating the learning outcomes based on competencies description in two fields of study (subject areas) of Russia's higher education: 'Philology' and 'Psychology'.

By way of illustration, we selected three competencies. The first one is 'general cultural' competence (*GCC*) — it is a generic competence for all fields of study at a particular level of higher education (in this case, we consider the undergraduate level). The second competence is 'general professional' one (*GPC*) — it is mandatory for a particular field of study, regardless of an educational programme's profile. The third competency is 'professional' (*PC*) — it correlates with a particular type of a graduate's intended professional activity (defined in federal educational standards) and/or a degree programme's profile.

III.1. *General cultural competence*

MULTILEVEL MAP OF COMMUNICATIVE COMPETENCIES OF GRADUATES AT UNDERGRAUATE, MASTER'S AND DOCTORAL LEVELS

THE COMPETNCY'S NAME AND CODE

The general cultural competence of a graduate of a higher educational programme at the undergraduate level.

U-GCC-5: The capacity to communicate verbally and in writing, in Russian and foreign languages in order to ensure interpersonal and intercultural interaction.

The general professional competency of a graduate of a higher educational programme at the master's level.

M-GPC-3: The capacity to communicate verbally and in writing, in Russian and foreign languages in order to solve professional tasks.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

The generic competence of a graduate of a higher educational programme at the doctoral level (training of research and teaching staff):

D-GC-4: The capacity to use modern methods and technology of research communication in national and foreign languages.

THE COMPETENCY'S OVERVIEW

This map describes related and successive competencies that define the language (communicative) capabilities of graduates at three levels of higher education (undergraduate, master's, doctoral). The experts suggest that these competencies should be developed based on the same principles throughout different levels of education in a continuous fashion.

For all higher education levels, three main facets of a graduate's language (communicative) expertize are described:

— The capability to create verbal and written texts in the professional sphere.
— The capability to correctly express oneself both verbally and in writing; the capability to edit verbal and written materials.
— The capability to use methods and technology of effective communication.

For each level, we describe only those mastery items, abilities and knowledge which are new compared to the previous levels.

Sublevel 1 (index[1]) of the learning outcomes is a recommended sublevel for subject areas 1-4, 9; sublevel 2 (index [2]), for subject areas 5-8.[6]

The degrees of foreign language proficiency are cited in compliance with the Common European Framework of Reference (CEFR) used in the European Union.

The entry level of knowledge, abilities and practical experience that is a prerequisite for the competencies under consideration corresponds to the general education programme requirements set forth by the Federal Educational Standards of General Education.

[6] According to the List of Main Fields of Study in Higher Education approved by Decree of Ministry of Education and Science of Russian Federation No. 1061 of 12 September 2013 "*On the Approval of the Lists of Higher Education Fields of Study*".

Table 1

Intended learning outcomes charecterizing stages of competence development and assessment criteria

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
First level (threshold) (U-GCC-5) **The capacity to communicate verbally and in writing, in Russian and foreign languages in order to ensure interpersonal and intercultural interaction.**					
Knowledge: Student knows the major rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy) and the system of genres/ styles of the Russian language. **Code K1 (U-GCC-5)**[1]	Displays no knowledge of the major rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses no knowledge of the system of genres/ styles in the Russian language.	Displays a weak and fragmented knowledge of the major rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a weak and fragmented knowledge of the system of genres/ styles in the Russian language. Makes numerous and serious mistakes.	Displays a minimal, satisfactory knowledge of the major rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a general knowledge of the system of genres/ styles in the Russian language. However, makes rather serious mistakes.	Displays a good knowledge of the major rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a rather comprehensive knowledge of the system of genres/ styles in the Russian language. Makes some occasional mistakes that are not serious.	Displays a solid knowledge of the major rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a full and proficient knowledge of the system of genres/styles in the Russian language. Makes no mistakes.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Knowledge: Student knows the system of rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy); the system of genres/ styles of the Russian language in its dynamics. **Code K2 (U-Gcc-5)**[2]	Displays no knowledge of the system of rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses no knowledge of the system of genres/ styles in the Russian language and its dynamics.	Displays a weak and fragmented knowledge of the system of rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a weak and fragmented knowledge of the system of genres/ styles in the Russian language in its dynamics. Makes numerous and serious mistakes.	Displays a minimal, satisfactory knowledge of the system of rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a general knowledge of the system of genres/styles in the Russian language in its dynamics. However, makes rather serious mistakes.	Displays a good knowledge of the system of rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a rather comprehensive knowledge of the system of genres/ styles in the Russian language in its dynamics. Makes some occasional mistakes that are not serious.	Displays a solid knowledge of the system of rules of the modern Russian language (orthography, punctuation, grammar, style, orthoepy). Possesses a full and proficient knowledge of the system of genres/styles in the Russian language in its dynamics. Makes no mistakes.

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Abilities: Student can use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language. **Code A1 (U-GCC-5)**[1]	Displays inability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language.	Displays a partial ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language. Makes numerous and serious mistakes.	Displays a minimal, satisfactory ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language. However, makes rather serious mistakes.	Displays a fairly stable ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language. Makes some occasional mistakes that are not serious.	Displays a solid ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language. Makes no mistakes.
Abilities: Student can use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language; the major grammar reference web-sites in the Internet. **Code A2 (U-GCC-5)**[2]	Displays inability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language; the major grammar reference web-sites in the Internet.	Displays a partial ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language; the major grammar reference web-sites in the Internet. Makes numerous and serious mistakes.	Displays a minimal, satisfactory ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language; the major grammar reference web-sites in the Internet. However, makes rather serious mistakes.	Displays a fairly stable ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language; the major grammar reference web-sites in the Internet. Makes some occasional mistakes that are not serious.	Displays a solid ability to use the major reference literature, explanatory dictionaries, and prescriptive dictionaries of the Russian language; the major grammar reference web-sites in the Internet. Makes no mistakes.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in producing, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis) in Russian on academic and research topics related to a particular field of study. **Code M1 (U-GCC-5)**[1] Student has a foreign language proficiency at the A2 level.	Displays inability to produce, either verbally or in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis) in Russian on academic and research topics related to a particular field of study. Does not have foreign language proficiency at the A2 level.	Displays a low ability to produce, both verbally or in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis) in Russian on academic and research topics related to a particular field of study. Makes numerous and serious mistakes. Has a low foreign language proficiency at the A2 level.	Displays a minimal, satisfactory ability to produce, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis) in Russian on academic and research topics related to a particular field of study. However, makes rather serious mistakes. Has a satisfactory foreign language proficiency at the A2 level.	Displays a good ability to produce, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis) in Russian on academic and research topics related to a particular field of study. Makes some occasional mistakes that are not serious. Has a good foreign language proficiency at the A2 level.	Displays a solid ability to produce, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis) in Russian on academic and research topics related to a particular field of study. Makes no mistakes. Has a high foreign language proficiency at the A2 level (is fluent and confident in using the language).

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in producing, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis as well as research texts) in Russian on academic and research topics related to a particular field of study. **Code M2 (U-GCC-5)2** Student has a foreign language proficiency at the B1 level.	Displays inability to produce, either verbally or in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis as well research texts) in Russian on academic and research topics related to a particular field of study. Does not have foreign language proficiency at the B1 level.	Displays a low ability to produce, both verbally or in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis as well as research texts) in Russian on academic and research topics related to a particular field of study. Makes numerous and serious mistakes Has a low foreign language proficiency at the B1 level.	Displays a minimal, satisfactory ability to produce, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis as well as research texts) in Russian on academic and research topics related to a particular field of study. However, makes rather serious mistakes. Has a satisfactory foreign language proficiency at the B1 level.	Displays a good ability to produce, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis as well as research texts) in Russian on academic and research topics related to a particular field of study. Makes some occasional mistakes that are not serious. Has a good foreign language proficiency at the B1 level.	Displays a solid ability to produce, both verbally and in writing, grammatically correct and logically coherent texts (abstracts, summaries, précis as well as research texts) in Russian on academic and research topics related to a particular field of study. Makes no mistakes. Has a high foreign language proficiency at the B1 level (is fluent and confident in using the language).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
The second level (intermediate) (M-GPC-3) **The capacity to communicate verbally and in writing, in Russian and foreign languages in order to solve professional tasks**					
Knowledge: Student knows the rhetoric dimension of verbal and written communication in the Russian language. Knows the standards and features of good Russian language. **Code K1 (M-GPC-3)**[1]	Displays no knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses no knowledge of the standards and features of good Russian language.	Displays a weak and fragmented knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a weak and fragmented knowledge of the standards and features of good Russian language. Makes numerous and serious mistakes.	Displays a minimal, satisfactory knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a satisfactory knowledge of the standards and features of good Russian language. Makes rather serious mistakes.	Displays a good knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a fairly comprehensive knowledge of the standards and features of good Russian language. Makes some occasional mistakes that are not serious.	Displays a solid knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a full and proficient knowledge of the standards and features of good Russian language. Makes no mistakes.

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Knowledge: Student knows the rhetoric dimension of verbal and written communication in the Russian language. Knows the standards and features of good Russian language. Knows linguistic persuasion techniques in the Russian language. **Code K2 (M-GPC-3)[2]**	Displays no knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses no knowledge of the standards and features of good Russian language; no knowledge of linguistic persuasion techniques.	Displays a weak and fragmented knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a weak and fragmented knowledge of the standards and features of good Russian language; a weak and fragmented knowledge of linguistic persuasion techniques in the Russian language. Makes numerous and serious mistakes.	Displays a minimal, satisfactory knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a general knowledge of the standards and features of good Russian language; a satisfactory knowledge of linguistic persuasion techniques in the Russian language. Makes rather serious mistakes.	Displays a good knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a fairly comprehensive knowledge of the standards and features of good Russian language; a fairly comprehensive knowledge of linguistic persuasion techniques in the Russian language. Makes some occasional mistakes that are not serious.	Displays a solid knowledge of the rhetoric dimension of verbal and written communication in the Russian language. Possesses a full and proficient knowledge of the standards and features of good Russian language; a full an proficient knowledge of linguistic persuasion techniques in the Russian language. Makes no mistakes.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Abilities: Student can analyse linguistic elements in Russian texts against language standards and make the necessary corrections. **Code A1 (M-GPC-3)**[1]	Displays inability to analyse linguistic elements in Russian texts against of language standards and make the necessary corrections.	Displays a partial ability to analyse linguistic elements in Russian texts against language standards and make the necessary corrections. Makes numerous and serious mistakes.	Displays a minimal, satisfactory ability to analyse linguistic elements in Russian texts against language standards and make the necessary corrections. However, makes rather serious mistakes.	Displays a fairly stable ability to analyse linguistic elements in Russian texts against language standards and make the necessary corrections. Makes some occasional mistakes that are not serious.	Displays a solid ability to analyse linguistic elements in Russian texts against language standards and make the necessary corrections. Makes no mistakes.
Abilities: Student can edit texts in scientific and formal styles of the Russian language. **Code A2 (M-GPC-3)**[2]	Displays inability to edit texts in scientific and formal styles of the Russian language.	Displays a partial ability to edit texts in scientific and formal styles of the Russian language. Makes numerous and serious mistakes.	Displays a minimal, satisfactory ability to edit texts in scientific and formal Russian. However, makes rather serious mistakes.	Displays a fairly stable ability to edit texts in scientific and formal styles of the Russian language. Makes some occasional mistakes that are not serious.	Displays a solid ability to edit texts in scientific and formal styles of the Russian language. Makes no mistakes.

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in producing written and oral texts in scientific and formal Russian for solving professional tasks. **Code M1 (M-GPC-3)**[1] Student has a foreign language proficiency at the B1 level.	No skill in producing written and oral texts in scientific and formal Russian for solving professional tasks. Does not have foreign language proficiency at the B1 level.	Displays a low level of skill in producing written and oral texts in scientific and formal Russian for solving professional tasks. Makes numerous and serious mistakes. Has a low foreign language proficiency at the B1 level.	Displays a minimal, satisfactory level of skill in producing written and oral texts in scientific and formal Russian for solving professional tasks. However, makes rather serious mistakes. Has a satisfactory foreign language proficiency at the B1 level.	Displays a good level of skill in producing written and oral texts in scientific and formal Russian for solving professional tasks. Makes some occasional mistakes that are not serious. Has a good foreign language proficiency at the B1 level.	Displays a solid level of skill in producing written and oral texts in scientific and formal Russian for solving professional tasks. Makes no mistakes. Has a high foreign language proficiency at the B1 level (is fluent and confident in using the language).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in producing written and oral texts with the use of figures of speech in scientific and formal Russian for solving professional tasks. **Code M2 (M-GPC-3)**[2] Student has a foreign language proficiency at the B2 level.	No skill in producing written and oral texts with the use of figures of speech in scientific and formal Russian for solving professional tasks. Does not have foreign language proficiency at the B2 level.	Displays a low level of skill in producing written and oral texts with the use of figures of speech in scientific and formal Russian for solving professional tasks. Makes numerous and serious mistakes. Has a low foreign language proficiency at the B2 level.	Displays a minimal, satisfactory level of skill in producing written and oral texts with the use of figures of speech in scientific and formal Russian for solving professional tasks. However, makes rather serious mistakes. Has a satisfactory foreign language proficiency at the B2 level.	Displays a good level of skill in producing written and oral texts with the use of figures of speech in scientific and formal Russian for solving professional tasks. Makes some occasional mistakes that are not serious. Has a good foreign language proficiency at the B2 level.	Displays a solid level of skill in producing written and oral texts with the use of figures of speech in scientific and formal Russian for solving professional tasks. Makes no mistakes. Has a high foreign language proficiency at the B2 level (is fluent and confident in using the language).

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
The third level (advanced) (D-GC-4) **The capacity to use modern methods and technology of research communication in national and foreign languages**					
Knowledge: Student knows rhetoric rules and techniques of preparing and delivering verbal presentations for the purposes of scientific, professional, and sociocultural communication in the Russian language. **Code 31 (D-GC-4)**[1]	No knowledge about rhetoric rules and techniques of preparing and delivering verbal presentations for the purposes of scientific, professional, and sociocultural communication in the Russian language.	Displays a weak, fragmentary knowledge about rhetoric rules and techniques of preparing and delivering verbal presentations for the purposes of scientific, professional, and sociocultural communication in the Russian language. Makes numerous and serious mistakes.	Displays a minimal, satisfactory knowledge about rhetoric rules and techniques of preparing and delivering verbal presentations for the purposes of scientific, professional, and sociocultural communication in the Russian language. However, makes rather serious mistakes.	Displays a good knowledge about rhetoric rules and techniques of preparing and delivering verbal presentations for the purposes of scientific, professional, and sociocultural communication in the Russian language. Makes some occasional mistakes that are not serious.	Displays a solid knowledge about rhetoric rules and techniques of preparing and delivering verbal presentations for the purposes of scientific, professional, and sociocultural communication in the Russian language. Makes no mistakes.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Knowledge: Student knows the theory of linguistic persuasion and its major methods, as well as the techniques of successful scientific, professional, and sociocultural communication in Russian. **Code 32 (D-GC-4)[2]**	No knowledge about the theory of linguistic persuasion and its major methods, as well as about the techniques of successful scientific, professional, and sociocultural communication in Russian.	Displays a weak, fragmentary knowledge about the theory of linguistic persuasion and its major methods, as well as about the techniques of successful scientific, professional, and sociocultural communication in Russian. Makes numerous and serious mistakes.	Displays a minimal, satisfactory knowledge about the theory of linguistic persuasion and its major methods, as well as about the techniques of successful scientific, professional, and sociocultural communication in Russian. However, makes rather serious mistakes.	Displays a good knowledge about the theory of linguistic persuasion and its major methods, as well as about the techniques of successful scientific, professional, and sociocultural communication in Russian. Makes some occasional mistakes that are not serious.	Displays a solid knowledge about the theory of linguistic persuasion and its major methods, as well as about the techniques of successful scientific, professional, and sociocultural communication in Russian. Makes no mistakes.
Abilities: Student can use major up-to-date technologies and methods of scientific communication, including informational ones, in national and foreign languages. **Code U1 (D-GC-4)[1]**	Displays inability to use major up-to-date technologies and methods of scientific communication, including informational ones, in national and foreign languages.	Displays some ability to use major up-to-date technologies and methods of scientific communication, including informational ones, in national and foreign languages. Makes numerous and serious mistakes.	Displays a minimal, satisfactory ability to use major up-to-date technologies and methods of scientific communication, including informational ones, in national and foreign languages. However, makes rather serious mistakes.	Displays a fairly stable ability to use major up-to-date technologies and methods of scientific communication, including informational ones, in national and foreign languages. Makes some occasional mistakes that are not serious.	Displays a stable ability to use major up-to-date technologies and methods of scientific communication, including informational ones, in national and foreign languages. Makes no mistakes.

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Abilities: Student can comprehensively use the system of up-to-date scientific communication technologies and methods, including informational ones, in national and foreign languages. **Code U2 (D-GC-4)**[2]	Displays inability to comprehensively use the system of up-to-date scientific communication technologies and methods, including informational ones, in national and foreign languages.	Displays some ability to comprehensively use the system of up-to-date scientific communication technologies and methods, including informational ones, in national and foreign languages. Makes numerous and serious mistakes.	Displays a minimal, satisfactory ability to comprehensively use the system of up-to-date scientific communication technologies and methods, including informational ones, in national and foreign languages. However, makes rather serious mistakes.	Displays a fairly stable ability to comprehensively use the system of up-to-date scientific communication technologies and methods, including informational ones, in national and foreign languages. Makes some occasional mistakes that are not serious.	Displays a stable ability to comprehensively use the system of up-to-date scientific communication technologies and methods, including informational ones, in national and foreign languages. Makes no mistakes.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in making accurate, consistent, clear, expressive and appropriate verbal presentations as well as texts of various genres in scientific and formal Russian. **Code M1 (D-GC-4)**[1] Student has a foreign language proficiency at the B2 level.	No skill in making an accurate, consistent, clear, expressive and appropriate verbal presentations as well as texts of various genres in scientific and formal Russian. Does not have foreign language proficiency at the B2 level.	Displays a low level of skill in making accurate, consistent, clear, expressive and appropriate verbal presentations as well as texts of various genres in scientific and formal Russian. Makes numerous and serious mistakes. Has a low foreign language proficiency at the B2 level.	Displays a minimal, satisfactory level of skill in making accurate, consistent, clear, expressive and appropriate verbal presentations as well as texts of various genres in scientific and formal Russian. However, makes rather serious mistakes. Has a satisfactory foreign language proficiency at the B2 level.	Displays a good level of skill in making accurate, consistent, clear, expressive and appropriate verbal presentations as well as texts of various genres in scientific and formal Russian. Makes some occasional mistakes that are not serious. Has a good foreign language proficiency at the B2 level.	Displays a solid level of skill in making an accurate, consistent, clear, expressive and appropriate verbal presentations as well as texts of various genres in scientific and formal Russian. Makes no mistakes. Has a high foreign language proficiency at the B2 level (is fluent and confident in using the language).

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of a competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in public speaking, reasoning, and polemicizing in scientific, professional, and sociocultural contexts in Russian. **Code M2 (D-GC-4)**[2] Student has a foreign language proficiency at the C1 level.	No skill in public speaking, reasoning, and polemicizing in scientific, professional, and sociocultural contexts in Russian. Does not have foreign language proficiency at the C1 level.	Displays a low level of skill in public speaking, reasoning, and polemicizing in scientific, professional, and sociocultural contexts in Russian. Makes numerous and serious mistakes. Has a low foreign language proficiency at the C1 level.	Displays a minimal, satisfactory level of skill in public speaking, reasoning, and polemicizing in scientific, professional, and sociocultural contexts in Russian. However, makes rather serious mistakes. Has a satisfactory foreign language proficiency at the C1 level.	Displays a good level of skill in public speaking, reasoning, and polemicizing in scientific, professional, and sociocultural contexts in Russian. Makes some occasional mistakes that are not serious. Has a good foreign language proficiency at the C1 level.	Displays a solid level of skill in public speaking, reasoning, and polemicizing in scientific, professional, and sociocultural contexts in Russian. Makes no mistakes. Has a high foreign language proficiency at the C1 level (is fluent and confident in using the language)

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

III.2. *General Professional Competency*

THE MAP OF GENERAL PROFESSIONAL COMPETENCY OF GRADUATES AT UNDERGRADUATE LEVEL (PSYCHOLOGY)

THE COMPETENCY'S NAME AND CODE

GPC-2 — a capability to find, substantiate and be responsible for solutions to professional tasks in non-standard circumstances.

THE COMPETENCY'S OVERVIEW

The general professional competency of graduates at the undergraduate level, 'Psychological Sciences', Code 37.00.00 in *UGNS* (Classification of Extended Groups of Main Fields of Study)

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Table 2

Intended learning outcomes characterizing stages of competency development and assessment criteria

Intended learning outcomes* (indicators of competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Knowledge: Student knows the scope and requirements of the profession; knows professional techniques to be used in standard and non-standard situations; knows professional ethics. **Code K (GPC-2)**	No knowledge.	Fragmentary, unorganised knowledge.	Displays some knowledge. While solving professional tasks, cannot distinguish between standard and non-standard situations.	Displays knowledge about the scope of the profession. Knows techniques to be used in non-standard conditions. However, cannot explain the connection between professional ethics and the techniques used.	Possesses the required system of knowledge and abilities; realizes the peculiarities and ethics of their professional application in different conditions.
Abilities: Student can substantiate his/her choice of a professional technique in non-standard conditions, taking into account professional ethics. **Code A (GPC-2)**	No ability.	Considerable mistakes in implementing professional techniques in non-standard conditions.	Cannot fully substantiate his/her choice of a professional technique to be used in non-standard conditions.	Can substantiate his/her choice of a professional technique to be used in non-standard conditions. However, there are some inaccuracies in implementing the technique.	Full and well-reasoned substantiation of his/her choice of a professional technique to be used in non-standard conditions.

Tuning Journal for Higher Education
 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes* (indicators of competency development)	**Assessment criteria for learning outcomes**				
	1	2	3	4	5
Mastery: Mastery of professional techniques in non-standard conditions **Code M (GPC-2)**	No mastery.	Considerable mistakes in implementing a professional technique in non-standard conditions.	Successfully applies professional techniques. However, does not fully considers the non-standard nature of the given conditions.	Successfully applies professional techniques in non-standard conditions. However, occasionally fails to consider alternative solutions and their ethical consequences.	Reasonably complies with professional ethics when choosing and implementing professional techniques in non-standard conditions.

III.3. *Professional competency*

THE MAP OF PROFESSIONAL COMPETENCY OF GRADUATES AT UNDERGRADUATE LEVEL (PHILOLOGY)

THE COMPETENCY'S NAME AND CODE

PC-9 — possession of the basic skills in processing and post-processing (e.g., proofreading, editing, annotating, abstracting, lexicographic description) of various types of texts.

THE COMPETENCY'S OVERVIEW

The professional competency is acquired by graduates who have Philology as their main field of study (major) at the undergraduate level.

PC-9's links to other competencies. PC-9 comprises a defined set of abilities and skills. It builds on knowledge-based competencies. PC-9 belongs to applied competencies and presumes the ability to: (1) collect and analyse (i.e., systematize, process, archive, alter, and summarize) linguistic and literary facts using traditional methods and up-to-date information technologies; (2) produce texts of various types using standard methods and according to the existing standards/rules: for example, verbal presentations, reviews, annotations, abstracts, memos, and reports, as well as formal, journalistic, or advertising texts; (3) manage an organization's documents; (4) perform processing and post-processing of texts of various types: specifically, to proofread, to edit, to annotate, to systematize, to summarize, and to abstract texts; (5) do reviews; and (6) participate in: compiling dictionaries and encyclopaedias; creating linguistic and literary reference books; issuing periodicals; processing and describing archive materials; and performing literary analysis. The development of PC-9 is based on general cultural and general professional competencies, such as GCC-5, GPC-2, GPC-4, GPC-5 and GPC-6. PC-9 is most closely connected with PC-8. The latter implies mastery of basic skills in creating texts of various types based on standard methods and according to the existing standards/rules.

Depending on the main field of study, PC-9 can be developed at two levels. Russian Philology or Foreign Language Philology as the main field of study requires only the first level of competency development. Meanwhile, Applied Philology requires the second one.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Table 3

Intended learning outcomes characterizing stages of competency development and assessment criteria

Intended learning outcomes (indicators of competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
First level/stage (PC-8)-I					
Knowledge: Student knows basic methods and techniques of text processing and post-processing; proof-reader's marks; spelling and punctuation rules.	No knowledge of basic methods and techniques of text processing and post-processing; proof-reader's marks; spelling and punctuation rules.	Displays a weak, fragmentary knowledge of basic methods and techniques of text processing and post-processing; proof-reader's marks; spelling and punctuation rules.	Displays a minimal, satisfactory knowledge of basic methods and techniques of text processing and post-processing; proof-reader's marks; spelling and punctuation rules.	Displays a fairly good knowledge of basic methods and techniques of text processing and post-processing; proof-reader's marks; spelling and punctuation rules.	Displays a well-organized and confident knowledge of basic methods and techniques of text processing and post-processing; proof-reader's marks; spelling and punctuation rules.
Abilities: Student can do proofreading, abstract all types of texts, annotate literary and scientific texts.	Displays inability to do proofreading, abstract all types of texts, annotate literary and scientific texts.	Makes serious mistakes in proofreading, abstracting all types of texts, annotating literary and scientific texts.	Makes numerous mistakes in proofreading, abstracting all types of texts, annotating literary and scientific texts.	Displays ability to correctly do proofreading, abstract all types of texts, annotate literary and scientific texts. Makes occasional mistakes.	Displays a solid and confident ability to do proofreading, abstract all types of texts, annotate literary and scientific texts.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Mastery: Student is skilled in basic types of editing, in methods of abstracting and annotating texts.	Displays no skills in basic types of editing, in methods of abstracting and annotating texts.	Displays poor skills in basic types of editing, in methods of abstracting and annotating texts. Makes numerous and serious mistakes.	Displays satisfactory skills in basic types of editing, in methods of abstracting and annotating texts.	Displays good skills in basic types of editing, in methods of abstracting and annotating texts. Makes some occasional mistakes that are not serious.	Displays a confident mastery of skills in basic types of editing, in methods of abstracting and annotating texts.
Second level/stage (PC-8)-II					
Knowledge: Student knows the basics of text theory and textual criticism; basic methods and techniques of text processing and post-processing; proof-reader's marks; fundamentals of lexicography; practical stylistics of the first foreign language (B language).	No knowledge of the basics of text theory and textual criticism; basic methods and techniques of text processing and post-processing; proof-reader's marks; fundamentals of lexicography; practical stylistics of the first foreign language (B language).	Displays a weak, fragmentary knowledge of the basics of text theory and textual criticism; basic methods and techniques of text processing and post-processing; proof-reader's marks; fundamentals of lexicography; practical stylistics of the first foreign language (B language).	Displays a minimal, satisfactory knowledge of the basics of text theory and textual criticism; basic methods and techniques of text processing and post-processing; proof-reader's marks; fundamentals of lexicography; practical stylistics of the first foreign language (B language).	Displays a fairly good knowledge about of the basics of text theory and textual criticism; basic methods and techniques of text processing and post-processing; proof-reader's marks; fundamentals of lexicography; practical stylistics of the first foreign language (B language).	Displays a well-organized, confident knowledge of the basics of text theory and textual criticism; basic methods and techniques of text processing and post-processing; proof-reader's marks; fundamentals of lexicography; practical stylistics of the first foreign language (B language).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Intended learning outcomes (indicators of competency development)	Assessment criteria for learning outcomes				
	1	2	3	4	5
Abilities: Student can edit journalistic and formal texts; assist in preparing materials for linguistic and other types of dictionaries.	Displays no ability to edit journalistic and formal texts; assist in preparing materials for linguistic and other types of dictionaries.	Makes serious mistakes in editing journalistic and formal texts; preparing materials for linguistic and other types of dictionaries.	Makes numerous mistakes in editing journalistic and formal texts; preparing materials for linguistic and other types of dictionaries.	Displays the ability to correctly edit journalistic and formal texts; assist in preparing materials for linguistic and other types of dictionaries. Makes some occasional mistakes that are not serious.	Displays a solid ability to edit journalistic and formal texts; assist in preparing materials for linguistic and other types of dictionaries.
Mastery: Student is skilled in basic types of editing; basic methods of lexicographic description; searching the Russian National Corpus.	No mastery of the basic types of editing; basic methods of lexicographic description; searching the Russian National Corpus.	Displays poor mastery of basic types of editing; basic methods of lexicographic description; searching the Russian National Corpus. Makes numerous and serious mistakes.	Displays a minimal, satisfactory mastery of basic types of editing; basic methods of lexicographic description; searching the Russian National Corpus.	Displays a good mastery of the basic types of editing; basic methods of lexicographic description; searching the Russian National Corpus. Makes some occasional mistakes that are not serious.	Displays a confident mastery of the basic types of editing; basic methods of lexicographic description; searching the Russian National Corpus.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

These competency maps were prepared by different groups of experts. Therefore, they illustrate different approaches to formulating learning outcomes. For example, philology experts describe a graduate's professional activity in sufficient detail. Conversely, experts in psychological sciences only confine themselves to general definitions. Obviously, their map has practically no relation to psychology per se. This refers to both learning outcomes and the definition of the competency outlined in the corresponding federal educational standard. Such competency map hardly discloses any concrete peculiarities of studying psychology.

IV. **Assessing achievement of learning outcomes**

IV.1. *Forms of controlling/assessing the achievement of learning outcomes*

As is shown above, a competency map is not confined to the description of learning outcomes. In line with the TUNING recommendations, it also provides criteria for their achievement as well as assessment scales. Thus, it offers an instrument for evaluating the level of competency acquisition at each stage of competency development.

The assessment scale presented in the competency maps is not identical to Russia's traditional five-mark grading system which, in fact, includes only four marks: 'unsatisfactory', 'satisfactory', 'good', and 'excellent'. However, the two scales overlap according to a number of parameters. The five-mark scale used in the competency maps is convenient for rank- and standards-based grading systems and is intentionally approximated to the European grading model.

Using competency maps, developers of a degree programme independently choose the necessary ways and methods of assessing learning outcomes in the course of current, end-of-module and final assessment.

For example, the following ways and methods of assessing learning outcomes can be used to evaluate the development of the PC-9 competency in Philology as the main field of study (major):

- **PC-9–I (mastery):** practical tasks of annotating and abstracting texts;
- **PC-9–I (abilities):** abstracting and annotating texts;
- **PC-9–I (knowledge):** practical tasks on rules of spelling and punctuation, and on proof-reader's marks; tests; dictations;
- **PC-9-II (mastery):** practical tasks on various types of editing and methods of lexicographic description; assignments based on searching the Russian National Corpus;

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

— **PC-9-II (abilities):** term paper or thesis;
— **PC-9-II (knowledge):** practical tasks on text theory, lexicography, basics of editing, and applied stylistics; tests.

IV.2. *Controlling/assessing the achievement of learning outcomes in subjects/modules and internships*

At least two sections of a degree programme must outline the ways and methods of learning outcomes assessment.

Firstly, the template of a competency map is supposed to be further supplemented by section *Final Assessment of Student's Competency Development*. The section is intended to describe the following:

— The ways of final assessment of competency development: for example, a report on practical training, a project defence, a complex practical assignment, etc.
— The place of final assessment in a degree programme: for example, work placement, end-of-module assessment, state final examination.

Secondly, this information must be specified in syllabi of subjects/modules and internships (according to 'The procedure for organizing learning activities on undergraduate, specialist-degree, and master's programmes').

For this purpose, it is recommended that the following sections are introduced to the template of a subject syllabus:

1. A subject's/module's intended learning outcomes in correlation with a degree programme's intended learning outcomes (graduates' competencies)

The section must be filled out in accordance with competency maps. Authors of a degree programme should in particular discuss cases where a competency is fully developed within a single subject/module or a subject/module completes its development. This enables to combine summative assessment of a competency acquisition with the end-of-module assessment of learning outcomes.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

For example:

Competency's code (specify the level of competency acquisition, if available in a competency map)	A subject's prospected learning outcomes
GC-1	A1 (GC-1) Student can _____
GPC-2	K1 (GPC-2) Student knows _____
PC-1 Final stage of competency development	A1 (PC-1) Student can _____ M1 (PC-1) Student is skilled in _____ Final assessment of the PC-1competency development

2. Interim assessment tools

This section includes lists of test questions, possible topics of reports, and examples of test assignments for a subject. It also contains the following table:

A subject's learning outcome	Scale and criteria for assessing a learning outcome (in accordance with the competency map)					Assessment procedures
	1	2	3	4	5	
A1 (GC-1) Student can _____						e.g., a practical assignment
K1 (GPC-2) Student knows _____						e.g., an oral interview, or tests
Final assessment of the PC-1 competency development						e.g., a complex practical task, project defence, or portfolio defence

Learning outcomes and ways of assessing their achievement can also be correlated in a special document, The Plan for Staged Competency Development.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

V. **Improving the Algorithm**

The proposed algorithm is still being enhanced. The academic community is currently discussing a few additions to it. Here we will only consider one debatable issue.

The algorithm implies that teachers use a competency map to specify a number of parameters for each component of a degree programme (subject, module, practical training, etc.) depending on the intended learning outcomes. These parameters include: technologies and methods of teaching and learning; the sequence, teaching workload and forms of taught classes and of self-study.

For this reason, it is, perhaps, sensible to introduce a special section to competency maps that would determine the correlation between the learning outcomes and the approximate number of subjects (or, in a broader sense, types of learning and teaching activity) required to achieve them. Alternatively, this section can be drawn up as a separate paper included in a degree programme's specification.

For example, a Bachelor of Philology must acquire the PC-9 competency that presumes mastery of basic skills in processing and post-processing of various types of texts: proofreading, editing, annotating, abstracting, and lexicographic description. The related learning outcomes can be achieved within such subjects as 'Practical Course of First Foreign Language (B language)', 'Practical Training in Spelling and Punctuation', 'Modern Foreign Language (B language): Theoretical course', 'Stylistics of First Foreign Language', 'Practical Stylistics', 'Basics of Editing', 'Literary Editing', 'Textual Criticism', 'Linguistic Analysis', 'Theory and Practice of Linguistic Persuasion', 'Communicative Practical Training', 'Practical Training in Creative Writing', etc.

Thus, a degree programme would become logically complete where it comprises: (1) the competency; (2) learning outcomes; (3) learning and teaching activities ensuring achievement of learning outcomes; (4) ways and methods to assess achievement of learning outcomes; and (5) assessment scales and criteria. All these components should be presented in one single table. This would be helpful in terms of linking the documents that are so different in form — namely, a competency map, a standard subject syllabus, a subject syllabus, and assessment materials (i.e., all those documents that an educational institution shall submit for expert examination in order to obtain state accreditation for a degree programme).

The competency-based algorithm we have proposed allows to handle learning outcomes, assessment methods and education technologies in a highly effective way. However, the benefits of this approach become tangible

only on condition of a *responsible team work of all faculty members* involved in development and delivery a degree programme. Importantly, all faculty members share responsibility for students developing the competencies (learning outcomes) specified in a degree programme. Therefore, all faculty members should clearly understand the place and role of their subjects (modules) in the overall structure of a degree programme.

Regrettably, such team work still makes an exception in Russia's academic community. Thus, a considerable methodological effort and a long time are required for the majority of Russian teachers to master and actively use the competency-based approach and its implementation algorithm we have proposed.

Bibliography

Decree of Ministry of Education and Science of Russian Federation No. 1367 of 19 December 2013: On Approval of the Procedure of Organization and Implementation of Learning Activity of Higher Education Programs – Bachelor, Specialist and Master Degree Programs".

Decree of Ministry of Education and Science of Russian Federation No. 1061 of 12 September 2013: "On the Approval of the Lists of Higher Education Fields of Study".

E.N. Kovtun and E.V. Karavaeva, "Adapting the Tuning Programme Profiles to the Needs of Russian Higher Education." *Tuning Journal for Higher Education* 1, no. 1 (November 2013): 187-202, http://www.tuningjournal.org

State Contract No. 12.P20.11.0019 of 28 October 2011, the grant recipient (2011-2013) – the Association of Classical Universities of Russia. http://www.acur.msu.ru/monitoring.php

The Tuning Russia. http://www.tuningrussia.org

About the Authors

ARTUR DEMCHUK (arthur@leadnet.ru) is Associate professor and Deputy Dean of the Faculty of Political Science at the Lomonossov Moscow State University (Russia). His research activities focus on comparative politics, conflict management, and methodological approaches to the modernization of Russian higher education. He has more than 15 years of experience in working with the Curriculum Development Association in classical university education. He participates in a number of international projects in the field of higher education, including TEMPUS projects. He is the Coordinator of the Centre for Networking and Academic Mobility of the Association of Classical Universities of Russia (ACUR). Mr. Demchuk holds a PhD in Philosophy (Lomonossov Moscow State University, Russia).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

YEVGENIYA KARAVAEVA (karavaeva@rector.msu.ru) is Deputy Vice-Rector of Lomonossov Moscow State University (Russia), Executive Director of the Association of the Classical Universities of Russia (ACUR). She has a PhD degree in Physics and Mathematics (Lomonosov Moscow State University). Her research interests focus on the modernization of Higher Professional Education, including the adaptation of the European methodological approaches to the Russian educational environment, and University Management and Quality Control. Between 2005 and 2015 she coordinated more than 10 research projects on innovation in education (funded by the Russian Ministry of Science and Education). From 2006 to 2007, Dr. Karavaeva was a member of the Task Force of the Russian Ministry of Science and Education that designed and developed a new model 'Federal Educational Standard'. She participates in a number of international projects in the field of higher education and has published more than 50 articles on the development of higher education and innovation in education in Russia and abroad.

YELENA KOVTUN (kovelen@mail.ru) is Deputy Dean of the Faculty of Philology at the Lomonossov Moscow State University (Russia) and Chair of Slavic and Central European Studies at the Russian State University for the Humanities. Her research activities focus on Slavic culture and literature, theory and history of science fiction, and methodological approaches to the modernization of Russian higher education. She has more than 20 years of experience in working with the Curriculum Development Association in classical university education as the Secretary and Deputy Chair of the Council on Curriculum Development in Philology. Since 2000 she participates in a number of international projects in the field of higher education, including adaptation of the European teaching methods in Russia (TUNING RUSSIA project included). She is an expert of the Association of Classical Universities of Russia (ACUR). Dr. Kovtun holds a PhD in Philology (Lomonossov Moscow State University, Russia).

SVETLANA RODIONOVA (rse14@mail.ru) is Associate professor of the Chair for Contemporary Russian Linguistics and Head of Curriculum Development Department at Bashkir State University (Ufa). She graduated from Lomonossov Moscow State University, Russia and has a PhD degree in Philology. Her research interests focus on Russian language semantics. She authored more than 100 publications including articles on teaching philological disciplines and on the modernization of higher education in Russia. From 1992 to 2015 she used to be a member of the Presidium of the Council on Curriculum Development in Philology of the Curriculum Development Association in classical university education. She is currently an expert of the Association of Classical Universities of Russia (ACUR). Dr. Rodionova was a member of the Task Force of the Russian Ministry of Science and Education that designed and developed a new 'Federal Educational Standard' in Philology. Between 2005 and 2013 she coordinated 3 and participated in 7 projects on innovation in education (funded by the Russian Ministry of Science and Education).

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 149-185
doi: 10.18543/tjhe-3(1)-2015pp149-185 • http://www.tuningjournal.org/

Tuning impact in Latin America: Is there implementation beyond design?

Pablo Beneitone and Maria Yarosh*

doi: 10.18543/tjhe-3(1)-2015pp187-216

Abstract: Deusto International Tuning Academy is undertaking a large-scale study to analyse the impact Tuning projects may have had in participating universities. More particularly, the study hopes to provide an unambiguous answer regarding the presence or absence of the implementation of a competence-based student-centred approach in the different world regions where Tuning projects have taken place. The present article focuses only on Latin America where two Tuning projects have been developed. It describes the findings of the first two stages of the study. After reporting the data, the authors argue that there is evidence of a Tuning impact in each of three intended impact domains: (1) understanding of the importance of a shift from content- to competence-based education; (2) provision of institutional support necessary to facilitate this change; and (3) appropriate teaching, learning and assessment within the general framework of the study plans and degree profiles.

Keywords: impact study; implementation; project evaluation; Tuning; Latin America; Tuning Latin America; competence-based approach; student-centred approach.

I. Introduction

A current trend in higher education is a shift from teacher to student centred learning. The student has to take an active part in building his or her own learning, turning the teacher into the facilitator, the one who helps to provide the resources (information, methods, tools), who creates environments and accompanies students, offering assistance and guidance throughout the process, thus raising student motivation, commitment and liking for and understanding of the usefulness of learning.

* Pablo Beneitone (pablo.beneitone@deusto.es) is Director of Tuning Academy at the University of Deusto (Spain). Maria Yarosh (mariayarosh@deusto.es) works at the Tuning Academy at the University of Deusto (Spain).

There was — and is — a recognition that in spite of their valuable differences, higher education systems faced common internal and external challenges related to the growth and diversification of higher education, the employability of graduates, the shortage of skills in key areas, the expansion of private and transnational education, the need to further encourage staff and student mobility, and, in the longer term, the desire to attract the best scholars from around the world in order to be leaders in different areas of research.

The reforms required cover all areas of higher education; this was true in Europe, and in most other world regions as well. Tuning emerged as a response to reform in Europe initiated by the Bologna Declaration, but the methodology developed has since been used in many regions where reform of higher education was being undertaken, where governments perceived as useful a model of reform that encouraged participation from academics at all levels, which provided links with the world of work, and had authenticity in terms of the culture of education in the country.

The development of competence based approaches to teaching and learning in higher education has been influenced by industry, where there has been a growing perception that new graduates are often unfit for the demands of the modern workplace, and from graduates themselves who have found that their range of skills and competences are lacking when they seek employment. Numerous reports from around the world attest to this.[1, 2]

A student centred approach to teaching and learning is the concomitant of the adoption of a competence oriented approach to curriculum design. Where learning is designed to focus on what students can do, can value, can innovate and be creative in, students have to be the active owners of their own development.

Tuning proposes a methodology whose aim is to facilitate the development of a competence-based and student-centred approaches in higher education. The first generation of Tuning projects invited universities to adopt the new paradigm and gave them an initial impulse by focusing on the curriculum design process, the first necessary step if this new approach is to be implemented. It was expected that equipped with the required conceptual framework and methodological tools, universities would be able to continue moving towards implementation after the project. However, no feedback mechamism has been established to check whether this was indeed happening.

---

[1] Wheebox, People Strong and the Confederation of Indian Industry (2014) *The India Skills Report* https://wheebox.com/wheebox/resources/IndiaSkillsReport.pdf

[2] Altbach P. G., Reisberg L., and Rumbley L.E. (2009) Trends *in Global Higher Education Tracking an Academic Revolution*. A Report Prepared for the UNESCO 2009 World Conference on Higher Education)

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

The present article focuses on Latin America and shares the findings of the first two stages of the impact research study. Section 1 starts with a very brief outline of the main characteristics of the two Tuning Latin America projects. Section 2 sets the global methodological framework of this impact evaluation study, while Section 3 introduces the general methodological decisions that shaped the first two stages. Data collection procedures, samples and the major findings of Stage One and Stage Two are presented in Sections 4 and 5. Section 6 discusses the findings relevant for each of the three intended Tuning impact domains. Finally, Section 7 discusses two possible directions of further research.

II. **The context: two Tuning projects in Latin America**

The Tuning Latin America projects were the first projects conducted by Tuning outside Europe. The concern for how to progress towards a shared area for universities while respecting traditions and diversity ceased to be an exclusive concern for Europeans and had already by 2004 become a global need.

From the beginning, two very specific problems faced by Latin American universities were pinpointed. On the one hand was the need to modernise, reformulate and make degree programmes more flexible in the light of new trends, of the requirements of society and of the demands of a fast changing world. On the other hand, which is linked closely to the first problem, the importance of transcending limits imposed by staff in terms of learning, by providing education that would enable what has been learnt to be recognised beyond local, national and regional institutional borders.

In its first phase (2004-2007) the Tuning Latin America project sought to engage academics and administrators in a wide debate, the goal of which was to identify and exchange information and improve collaboration between higher educational institutions, with a view to developing the quality, effectiveness, comparability and transparency of degree programmes within the region. It allowed the importance of competences to take centre stage in the process of curriculum reform and modernization.[3]

The second phase of Tuning Latin America (2011-2013) started on already-fertile terrain — with the fruits of the previous phase and in view of the current demand on the part of Latin American universities and governments to facilitate the continuation of the process that had already been embarked on.

[3] Pablo Beneitone et al., eds. Reflection on and Outlook for Higher Education in Latin America. (Bilbao: University of Deusto – University of Groningen, 2007), 17.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

The second project involved 182 Latin American universities with the aim of contributing to build a Higher Education Area in the region. This challenge took the form of four very specific central working themes:

- A deeper understanding of agreements involving designing meta-profiles and degree profiles in the 15 subject areas included in the project (Administration, Agronomy, Architecture, Law, Education, Nursing, Physics, Geology, History, Information Technology, Civil Engineering, Mathematics, Medicine, Psychology and Chemistry).
- Contributing to reflections on future scenarios for new professions.
- Promoting the joint construction of methodological strategies in order to develop and assess competences.
- Designing a system of credits (CLAR — Latin American Reference Credit) to facilitate recognition of studies in Latin America as a region that can be articulated with systems from other parts of the world.[4]

Tuning expected, in terms of impact, a clear understanding at university level of the importance the shift from programmes based on knowledge to those which also included competences. A second impact intended was the creation of conditions that favour implementation in terms of institutional policy and culture. A third envisaged impact was that the universities modify their study plans and face the challenge of using agreed competences as a point of reference for the design of curricula and for developing degree profiles. This point was tied to teaching, learning and assessment, including the estimation of student workload and the allocation of credits at the level of units and programmes.

After ten years of development, the Project in Latin America completed the design stage, opening a process for consolidating these issues and allowing them to mature within the universities, which included implementing complete degree programmes following the Tuning methodology. The way these challenges have been developed by the Latin American universities is the core of this paper.

III. **Impact Evaluation Study: theoretical framework**

Evaluation can happen at different points with respect to the lifecycle of a project, can pursue different goals and can adopt different methodological approaches. Yet it must be done with rigour, to ensure maximum objectiveness.

[4] Pablo Beneitone, Julia González and Robert Wagenaar, eds. Meta-profiles and profiles: a new approach to qualifications in Latin America (Bilbao: University of Deusto, 2014), 11-12.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Impact evauation attempts to measure the effects that a project might have had. Let us look at three definitions of impact studies, which are very similar to each other, but emphasize slightly different aspects of this type of research inquiries.

The definition proposed by 3ie is as follows:

> Rigorous impact evaluation studies are analyses that measure the net change in outcomes for a particular group of people that can be attributed to a specific programme using the best methodology available, feasible and appropriate to the evaluation question that is being investigated and to the specific context.[5]

The Austrian Development Agency similarly focuses on the desired effects when looking at the effects of an intervention.[6] The World Bank, on the other hand, does not characterize impact as positive or negative but defines impact evaluation as a study that *"assesses changes in the well-being of individuals, households, communities or firms that can be attributed to a particular project, programme or policy*".[7] The OECD separates intended from unintended effects, and suggests that an impact study should take both into account: *"impact evaluation is an assessment of how the intervention being evaluated affects outcomes, whether these effects are intended or unintended*."[8]

Defining the notion of *impact* is important:

> How impact is defined will necessarily determine the scope and content of the study because different definitions prioritize different aspects of "impact"; imply different concepts of causality (what produces the impact); and how to estimate the impact (evaluation designs).[9]

Apart from positive or negative, intended or unintended effects, it is also useful to define the impact in terms of expected versus unexpected, immediate versus long-lasting and as experienced or not by particular stakeholders or at the level of institutions or communities or whole regions.[10]

---

[5] Elliot Stern et al., Broadening the Range of Designs and Methods for Impact Evaluations (2012), 6.

[6] Austrian Development Agency, *Guidelines for Project and Programme Evaluations* (Vienna: Austrian Development Agency, 2009), 2.

[7] "What is impact evaluation?", last modified 2011, http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTISPMA/0,,menuPK:384339~pagePK:162100~piPK:159310~theSitePK:384329,00.html

[8] OECD, *Outline of Principles of Impact Evaluation*, (n.d.), 1, http://www.oecd.org/dac/evaluation/dcdndep/37671602.pdf

[9] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 5.

[10] Elliot Stern, *Impact Evaluation: A Guide for Commissioners and Managers* (London: Bond for International Development, 2015), 7.

The two major purposes of impact evaluation seem to be on the one hand, obtaining feedback or learning from experience (checking what worked and what did not, where, for whom; what can or need to be improved and how); and accountability on the other.[11, 12] Another purpose is demonstrating that the project has indeed had some or all of the intended effects.[13]

Two caveats have to be taken into account in good impact evaulation: (1) the difficulty of proving cause-effect relations in real-life large-scale projects and (2) the caution necessary when formulating recommendations (whether about project elements to be maintained or those in need of improvement) due to the danger of generalization. Caution is recommended by most if not all sources that discuss impact evaluation studies.[14] Newcomer, Hatry and Wholey, for example,[15] suggest that evaluators should limit themselves to speaking about *plausible attribution*, recognizing that there may be external causes of the effects reported.

Concerning generalization, the similarity of the contexts and conditions (including the impossibility of accounting for other contributory factors) will determine the extent to which an aspect of a programme which worked (or failed to work) in one situation within a past project is likely to work (or fail again) in the future project.[16, 17, 18]

In terms of the methodology and evaluation design, three issues are important: (1) the timing of the evaluation; (2) the formulation of evaluation questions and choice of the methods to be used, both in relation to the evaluated project attributes; and (3) the triangulation and contextualization of the findings.[19, 20, 21]

The timing, or the decision to proceed with an impact evaluation, is key because different effects become noticeable at different stages of a project.

---

[11] "What is impact evaluation?"

[12] OECD, Outline of Principles of Impact Evaluation, 1.

[13] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, i.

[14] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, ii and 4.

[15] Kathryn E. Newcomer, Harry P. Hatry, Joseph S. Wholey, "Planning and Designing Useful Evaluations." In *Handbook of Practical Program Evaluation*, edited by Kathryn E. Newcomer, Harry P. Hatry, Joseph S. Wholey, 5-29. (San Francisco: Jossey-Bass, 2010), 15.

[16] Newcomer, Hatry, Wholey, "Planning and Designing Useful Evaluations", 16.

[17] OECD, Outline of Principles of Impact Evaluation, 1.

[18] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 8.

[19] OECD, Outline of Principles of Impact Evaluation, 2.

[20] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, i.

[21] Stern, Impact Evaluation: A Guide for Commissioners and Managers, 10.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

While some effects can be present during the project lifetime but cease to exist once the project is over, others might not appear till some time after the project finalization.

Evaluation questions need to be as concrete as possible since they determine the type of data collected and the types of responses the evaluation study will be able to provide. Evaluators need to consider each of the originally intended project outcomes and formulate questions related to the domains of impact they or the party who commissions the evaluation consider most relevant.[22]

There is no single perfect evaluation design or data collection method for impact evaluation studies.[23] Until quite recently, comparing the situation before and after a project and comparing the conditions of project beneficiaries with their counterparts not affected by the project were considered to be the only valid methods.[24, 25] Nowadays, however, the most important aspect is that of reconciling evaluation questions and the evaluation design used (the methods) with the inner logic of the programme or project.[26, 27] Indeed, the beneficiaries, scope and types of intended effects, not to mention the pace at which changes can be expected to happen, the interdependence of such changes or different aspects, and the type of indicators, all differ from project to project. Evaluators, thus, have more liberty, but also more responsibility for selecting the methods to find responses to the questions relevant for "their" project.

Case study is one of the methods that has proved valuable in impact evaluation. "Studies of 'cases' that combine within-case analysis and comparisons across cases are especially suited to impact evaluation in complex settings".[28] Evaluators need to identify the appropriate unit of analysis,[29] but when this is done, the results can be very promising. Thus:

> Cases may be policy interventions, institutions, individuals, events or even countries during a particular historical period. This represents a shift from focusing causal analysis on variables taken out of their specific context. Locating variables in the context of the 'case' and conducting within-case analysis alongside comparisons across cases has opened up major new

[22] Austrian Development Agency, Guidelines for Project and Programme Evaluations, 3.
[23] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 5.
[24] Austrian Development Agency, Guidelines for Project and Programme Evaluations, 10.
[25] OECD, Outline of Principles of Impact Evaluation, 2.
[26] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, i.
[27] Stern, Impact Evaluation: A Guide for Commissioners and Managers, 10.
[28] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 14.
[29] Stern, Impact Evaluation: A Guide for Commissioners and Managers, 14.

> opportunities for causal analysis that are still largely ignored in evaluation practice.[30]

The use of case studies could, therefore, be an optimal solution in terms of the need to triangulate and contextualize the findings. They may also provide a solution to another long neglected issue: the involvement of project participants and/or beneficiaries in impact evaluation.[31] Although different levels of involvement and types of participation might be appropriate for different projects, if evaluators do not identify and take into account the opinions of the different project stakeholders or beneficiaries, the findings are bound to be partial, if not biased.

To conclude, a project impact evaluation study needs to comply with a number of general principles that regulate this type of enquiry, but it needs to have considerable freedom and responsibility in terms of defining the impact to be evaluated, in formulating concrete questions and in selecting the methods to be applied.

IV. **Methodology**

The general purpose of this Tuning impact study was to explore the effects of the two Tuning Latin America projects (Phase 1: 2004-2007; Phase 2: 2011-2013) in Latin American universities. More particularly, the study aimed to discover to what extent a competence-based student-centred approach to teaching, learning and assessment in higher education degree programmes had been implemented by the different participating institutions. It was also important for the Tuning Academy to obtain feedback and learn what improvements identified as desirable by the project participants could be implemented after the completion of the projects. These may have simply remained as a topic of discourse; they may have been implemented on paper but not in practice; or they may have been rejected or forgotten in the course of post-project intra-institutional or national reforms.

The design of the impact study was seen to satisfy at least three basic requirements. First of all, it was important to identify institutions where the competence-based student-centred approach advocated in the Projects had been implemented. The experiences of such institutions could be valuable for others wishing to introduce curriculum reform. Secondly, a centralized impact evaluation could give each participating institution the possibility of

[30] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 27.
[31] See Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 21.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

sharing its achievements and concerns, as well as comparing their approaches and results with others in their region or their area of studies. Thirdly, the Tuning Academy needed to collect data on the status of the impelementation of a competence-based student-centred approach so as to better organize future efforts, to build on what has been achieved, and address any issues which have not been resolved.

Thus, regarding the first key question of any impact study — whether or not to proceed with an evaluation at all[32] — a positive answer was given because, nearly 10 years after the start of the first Tuning Latin America project, it was essential to obtain systematic feedback on the effectiveness of the initiative. Since no impact studies of Tuning projects had been conducted before, it was not clear whether the timing was fully suitable.[33, 34] However, it was important to identify the current state of affairs, while recognizing that any fundamental change in higher education is necessarily an evolving process.[35]

With respect to the scope, it was decided to focus specifically on implementaion at the level of first-cycle degree programmes. The study was to look into the extent of the intended effects now observable along the different Tuning lines of action.

The four Tuning lines of action are: 1) agreeing on the competences to be developed (generic and subject specific); 2) sharing expertise in approaches to teaching, learning and assessment of these competences; 3) measuring student workload and credits; and 4) evaluating the quality of programmes. The first line analyses transversal competences as well as those that are specific to subject areas. The second line invite academics to share the most effective methods of teaching, learning and assessment for achieving the competences identified. The third line proposes a reflection on the impact and relationship of this system of competences with the student's workload, and its connection with the resulting time measured in credits. Finally, the fourth line highlights the fact that quality is an integrating part of the design of the competence-based curriculum, essential in articulating the three previous lines.

All the institutions participating in both of the Tuning Latin America Projects were invited to participate — on a voluntary basis. The study was

---

[32] OECD, Outline of Principles of Impact Evaluation, 2.

[33] "What is impact evaluation?"

[34] Sabine Garbarino and Jeremy Holland, *Quantitative and Qualitative Methods in Impact Evaluation and Measuring Results,* (2009); accessed at http://www.gsdrc.org/docs/open/EIRS4.pdf, 3.

[35] Stern et al, Broadening the Range of Designs and Methods for Impact Evaluations, 36.

© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

conducted by the Tuning Academy at the University of Deusto and no external funding was available to compensate for the time dedicated to participation in the study on the part of Latin American universities.

The main evaluation questions were three:

(1) What is the general picture of the implementation of a competence-based student-centred approach in participating Latin American universities?

(2) Which participating institutions succeeded in implementing the competence-based student-centred approach at the level of at least one first-cycle degree programme as opposed to cases of (a) implementing the approach in single courses within a degree programme or (b) implementing certain aspects of this approach, whether in separate departments or at the level of the whole university?

(3) What difficulties have been experienced by those actively trying to implement a competence-based student-centred approach?

A three-stage study was designed to answer these questions. Stage One was aimed at obtaining a response to the first question above and at identifying potential cases of successful implementation. Stage Two further explored the successful cases identified, as well as responding to question three above. Stage Three, finally,will focus on a small number of cases of successful implementation and explore these in greater detail. This article reports on Stages One and Two which have already been completed. Stage Three is to be conducted in the near future and will be discussed in a subsequent publication.

The general methodological approach adopted in Stages One and Two was quantitative. Both Stages used online questionnaires as the research instrument in which open questions were avoided as much as possible. Stage Three, in turn, will use interviews and focus-groups, which will permit the collection of qualitative data from a small number of cases studied in detail, providing depth to the general picture described in this article.

V. **Stage One: Procedure, Sample and Findings**

Stage One was conducted between October and November 2013. 160 institutions in 18 Latin American countries were invited, by email, to participate. The Tuning Impact Questionnaire was developed simultaneously in both Spanish and Portuguese.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

V.1. *Stage One: the Data Collection Instrument*

Respondents were asked to report on the impact the Tuning project(s) might have had in their university in relation to introducing or further implementing competence-based student-centred learning, in terms of the following five aspects:

- Curriculum development.
- Approaches to teaching, learning and assessment.
- Assessment of the students' workload.
- Introducing a system of credits based on students' workload calculations.
- Offering staff development in order to help them introduce competence-based student-centred approach.

These five aspects are closely linked to the Tuning lines: curriculum development including generic and subject specific competences with Line 1; teaching learning and assessment with Line 2; student workload and the definition of a credit system with Line 3; and administrative support with the core of Line 4.

The questionnaire explicitly asked about the impact of Tuning projects. This means that cases in which a competence-based student-centred approach had been introduced before the institution participated in any Tuning projects or independent of such participation were not included in this research.

The four levels of implementation envisaged for each of the aspects were:

- Zero — nothing has changed despite participation in the Tuning project(s).
- First — the improvements in question have been implemented in the programmes of the respondent's subject area.
- Second — the improvements in question have been implemented in some subject areas within the respondent's institution.
- Optimal — the improvements in question have been implemented in the whole university.

Respondents who reported positive changes in any of the aspects were further asked to indicate whether any documentation exists (study plans/ student guides/didactic materials/strategic plans/reports, etc.) that demonstrates that they the changes are related to the respondents' participation in the Tuning project(s).

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

V.2. *Stage One Sample Description*

In total, respondents from 133 out of the 160 higher education institutions from 18 Latin American countries completed the questionnaire, giving a response rate of 83.1% in terms of institutions and 100% in terms of countries. All fifteen of the subject areas, were represented in the sample. All respondents had participated in the Tuning projects and were still working at the same university where they had worked during the projects.

Geographically, out of the 133 universities, 19 were from Argentina, 7 from Bolivia, 14 from Brazil, 13 from Chile, 15 from Colombia, 3 from Costa Rica, 3 from Cuba, 8 from Ecuador, 5 from El Salvador, 3 from Guatemala, 2 from Honduras, 11 from Mexico, 5 from Nicaragua, 4 from Panama, 5 from Paraguay, 7 from Peru, 2 from Uruguay, and 7 from Venezuela.

V.3. *Stage One Findings*

As shown in Figure 1, in 122 higher education institutions out of 133 (91.7%), noticeable changes were reported resulting from implementing the recommendations of the Tuning project in at least one of the five aspects noted above and in at least one subject area. In addition, 62 institutions (46.6%) reported having implemented changes in all the five aspects at least at the level of one subject area (and were able to provide written documents to support their opinion). Finally, 10 universities (7.5%) believed that

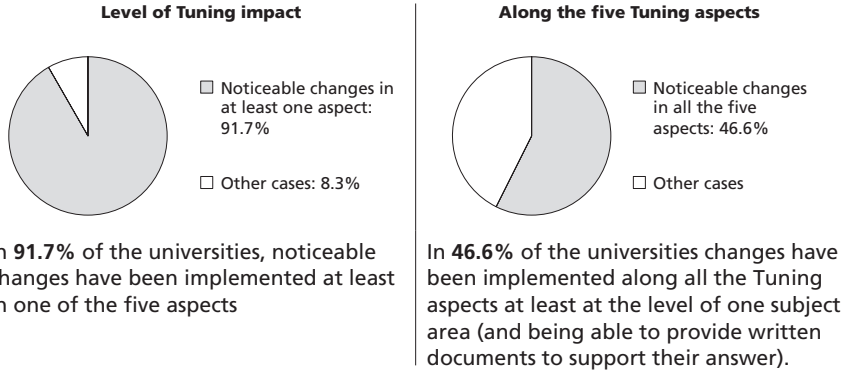

Figure 1

Stage One Findings: Level of impact of Tuning in different implementation aspects

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Tuning-influenced changes had been implemented in all of the five aspects across the whole university and could provide documentary evidence to support this claim.

Table 1 (below) gives more detailed information on the responses obtained along the different Tuning lines. The highest implementation level was reported for the domains of (1) the design and revision of curriculum, study programmes and plans; and (2) teaching, learning and assessment methods (75.9% for each of them). More than half of the universities stated that staff development initiatives have been available to support teachers, although the questionnaire format did not permit identification of what exactly was offered in terms of content, format, variety, etc. Finally, the workload aspect — and especially the introduction of a system of credits — seems the one where fewer universities have been able to advance.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Table 1

Implementation levels reported along the five Tuning methodology aspects

Question (Implementation aspects related to Tuning)	Implementation level reported (number of institutions; out of 133)				
	No	Yes			
		(a) Yes, but only in my subject area	(b) Yes, but only in some faculties/ departments/ centres/ degrees/ subject areas	(c) Yes, in the whole university	Total of implemented (a+b+c)
Has the competence-based student-centred approach been applied to revising or creating curricula/study programmes/plans?	32 (24.1%)	28	43	30	101 (75.9%)
Have the teaching, learning and evaluation methodologies been changed in any way following the competence-based student-centred approach?	32 (24.1%)	34	42	25	101 (75.9%)
Has the time and effort required from students (students workload) been considered in order to adjust study programmes?	48 (36.1%)	27	31	27	85 (63.9%)
Has any system of credits based on the students' workload been introduced (ECTS/ CLAR/other)?	73 (54.9%)	12	21	27	60 (45.1%)
Have teachers been offered relevant training (in order to help them introduce competence-based student-centred approach)?	44 (33.1%)	14	44	31	89 (66.9%)

VI. **Stage Two: Procedure, Sample and Findings**

In Stage Two (June-October 2014) first-cycle degrees were selected as the unit of analysis. Those institutions reporting noticeable changes along the five aspects in Stage One, and able to provide supporting documentation, were invited to participate. More precisely, they could participate if they considered that they had at least one first-cycle degree programme which: (1) could be considered an example of successful implementation of a competence-based student-centred approach, with this success clearly attributed to participation in the Tuning project(s), and (2) could provide from those involved in the programme at least three academic executives, ten teachers, and twenty-five students who were willing to respond to the on-line questionnaire. Academic executives were high-level academic administrators who are in charge of degree programme development (deans, heads of the departments, vice-rectors, etc.). These administrators had to be fully familiar with the degree programme proposed as an example of successful implementation. Teachers could be any members of the teaching staff who give classes within the programme in question. Students were chosen from the selected degree programme and had to be in their 3rd or 4th year of studies, if possible.

The contact person at each of the universities (normally a former Tuning Latin America project participant) was sent an email with the links to the three online questionnaires and was in charge of forwarding the links to the potential respondents and ensuring the required number of responses. Close to the first deadline these contact persons were informed of how many academic executives, teachers and students from their university had responded so far, to enable them to invite more respondents from the categories where a shortfall existed. Thus, monitoring was done at the central level, but efforts to get the minimum required number of respondents were done by the contact persons at local level.

VI.1. *Stage Two Data Collection Instrument*

Three different questionnaires were developed for Stage Two: one for academic executives, one for teachers and one for students.

The academic executives were asked about the perceived impact of the Tuning projects on the design and planning of a competence-based student-centred approach in the degree programmes of their departments; about the difficulties experienced in the process of implementation; and about external

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

contributory factors (e.g a policy promoting a competence-based student-centred approach and the level of autonomy universities have in order to introduce changes into the curriculum design. They were also asked about institutional support for the change (e.g.in the form of developing guidelines for academics, and degree programmes, providing staff development or appointing a person to monitor the process).

The teaching staff was also asked about the perceived impact of the Tuning projects on the design and planning of a competence-based student-centred approach in the degree programmes of their departments, as well as about the difficulties experienced in the process of implementation. A number of questions explored the current teaching and assessment practices (to see how close they came to fully implementing the approach). Furthermore, teachers' opinions were explored about a competence- based approach compared with a content-focused one. Finally, the issue of staff development initiatives aimed at helping academics adopt the new approach was addressed.

Most of the questions addressed to students were aimed at soliciting information about the teaching, learning and assessment activities they have experienced (to compare the data with teachers' responses). Student opinions about a competence-based student-centred approach were also invited.

VI.2. *Stage Two Sample Description*

27 institutions were both able to demonstrate their eligibility and were ready to undertake the Stage Two consultation. This was the first big step towards the identification of institutions whose implementation experiences could be considered best practice (and studied in Stage Three). 21 of these eligible universities completed the whole process of Stage Two data collection.[36]

As a result, Stage Two sample comprises 11 Latin American countries, with 21 institutions. Namely, these are Argentina (1 HEI), Bolivia (2 HEIs), Chile (4), Ecuador (1), El Salvador (2), Guatemala (1), Honduras (2), Mexico (1), Panama (2), Paraguay (3) and Perú (2). As for the subject areas represented, these are 15 and as follows: Agronomy (Chile), Architecture (Chile), Biophysics (Ecuador), Business Administration (Bolivia and Honduras), Chemistry (Argentina and Peru), Civil Engineering (Guatemala), Computer Engineering (Paraguay), Educational Administration and

[36] Incomplete sets of responses were not included into the analyses that are presented below.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Management (Honduras), Law (El Salvador), Mathematics (Bolivia), Mathematics and Physics (Paraguay), Medicine (Chile, Panama and Peru), Modern Languages (El Salvador), Nursing (Chile, Mexico and Paraguay) and Psychology (Panama).

The second stage respondent sample comprised 70 academic administrators, 237 members of the teaching staff and 658 students. These numbers mean that for each category more than the required minimum of responses was received (the exact minimum for 21 institutions would have been 63, 210 and 525 respondents for the three groups).

VI.3. *Stage Two Findings*

The most general question about the possible impact of the Tuning projects on the implementation of a competence-based student-centred approach asked academic executives and teachers to what extent, in their opinion, the Tuning project had had an impact on the design and planning of the degree programmes in their department. Table 2 shows the results which suggest generally strong or at least a certain positive impact in the majority of cases: positive Tuning impact was reported by 92.85 % of academic executives and 92.4% of teaching staff; and strong (considerable or very strong) impact was reported by 77.15% of academic executives and 65.5% of the teaching staff.

Table 2

Tuning Impact on Implementation of Design and Planning of Competence-Based Student-Centred Learning

Response	Academic Executives [of 70]	Teachers [of 237]
To a great extent	20%	20.7%
To a considerable extent	57.15%	44.7%
To a little extent	15.7%	27%
To no extent	7.15%	7.6%

ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

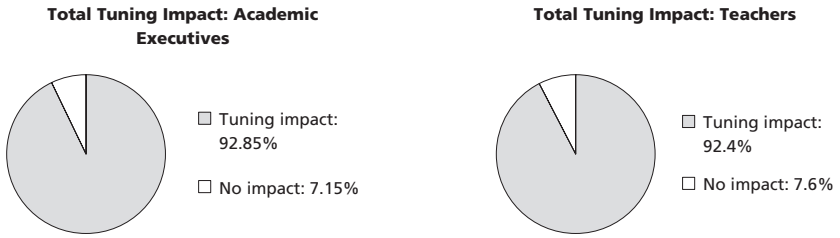

Figure 2

Stage Two Findings: Respondents who estimate that Tuning has had impact*

* The "total Tuning impact" category comprises three types of answers: "to a little extent", "to a considerable extent" and "to a great extent".

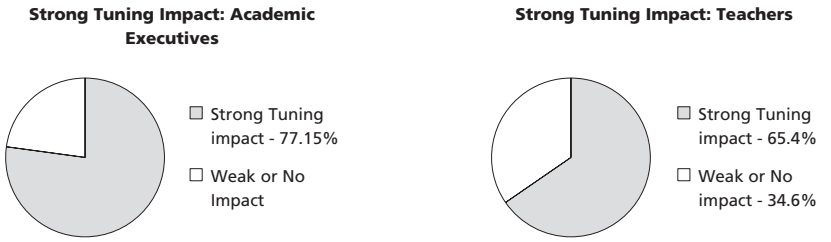

Figure 3

Stage Two Findings: Respondents who estimate Tuning impact as strong*

* The "strong Tuning impact" category comprises two types of answers: "to a considerable extent" and "to a great extent".

In the questionnaires for academic executives, two types of factors potentially contributing to successful implementation of a competence-based student-centred approach were distinguished: external factors which cannot be directly controlled by the university authorities, and internal factors which can be created or strengthened by them. Two major external factors reported in this study were the presence or absence of a policy favourable for the change, and the level of authority universities have to introduce changes into curricula.

However, neither of these external factors were seen as preventing implementation. The level of autonomy reported by the academic executives in the sample is high: 83.8% consider that their institutions have the autonomy

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

"*at the level of structuring and designing degree programmes*"; 98.5% believe that there is enough autonomy "*at the level of procedures and teaching methods to be used*"; and all of them (100%) reported enjoying autonomy to introduce changes "*at the level of evaluation methods and procedures*".

The other external contributing factor — a specific policy in the higher education sector in the country that promotes or contains indications with respect to the implementation of a competence-based student-centred approach — was recognised as present by 72.1% of the academic executives (20.6% reported that such a policy "clearly establishes guidelines for university degrees", while 51.5% remarked that the policy in their context was "very general or partial").

Internally, two elements to encourage successful implementation were highlighted: creating guidelines to help academics adopt and implement the new approach and establishing a system of monitoring. As for institutional support, documentation or guidelines that facilitate or support the implementation of a competence-based student-centred approach appear to have been developed by the university authorities in 86.8% of cases; and the implementation process is monitored, by different agents, in 91.2% of cases.

With respect to the difficulties encountered in the implementation process, as shown in Table 3 (below), academic executives and teaching staff seem to agree in perceiving resistance on the part of the teaching staff as more significant than on the part of the students (more than 50 percent of academic executives and of teachers report having experienced the former, while only 28% of academic executives and 33.7% of teachers, the latter). Financial support is considered insufficient by slightly more than half of the respondents in each of the two categories, despite the positively valued engagement of the university authorities. More than half of the academic executives and teachers consider a competence-based student-centred approach to be complex, and more than 60% in both groups consider that teaching staff have not been sufficiently prepared for the new approach.

Regardless of the difficulties reported, 84% of the teachers reported focusing on generic or subject specific competences in the courses they teach. Out of those who help their students develop at least one generic competence (65.4%), 67.1% are working with the generic competences agreed upon in Tuning. That is, 45.2% of respondents used the Tuning list to select the generic competence(s) focused on in their courses, while a further 21.9% chose the generic competence from either the Tuning list or from other sources.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Table 3

Difficulties experienced by the university, department or degree programme while implementing the the competence-based student-centred approach: Perceptions of Academic Executives compared with perceptions of Teaching Staff

Difficulty	Academic Executives		Teachers	
	Disagree	Agree	Disagree	Agree
Resistance against the competence-based student-centred approach on the part of the teaching staff	36.7%	63.2%	46.8%	53.1%
Resistance against the competence-based student-centred approach on the part of the students	72.0%	28.0%	66.3%	33.7%
Insufficient financial support	45.6%	54.4%	39.7%	60.3%
Insufficient preparation and training of the teaching staff for this approach	22.3%	67.6%	35.0%	65.0%
Insufficient leadership and engagement on the part of academic executives/authorities	66.2%	33.8%	57.8%	42.2%
The complexity of the competence-based student-centred approach	42.6%	57.4%	49.4%	50.6%

If we compare these responses with those provided by students enrolled in the same degree programmes at the same universities, 10.5% considered that a competence-based student-centred approach has not been applied in the courses they followed or had followed, while the other 89.5% believed it had, with 16% reporting that the new approach had been adopted in all the courses they had taken so far in their programme. In 89% of the courses that follow a competence-based student-centred approach students were informed about the competences they were expected to (further) develop in each particular course.

There also exists a positive correlation between teachers who follow a competence-based student-centred approach and the perceived level of the Tuning impact on the whole. Thus 95.5% of the teachers who have adopted this approach believe that this was at least to some extent due to their participation in the Tuning projects, while 47.7% of this group report this cause-effect relation to be strong or very strong.

A number of questions included in the questionnaire permit us also to see an initial outline of methods of assessment, the central part of any pedagogical approach. Thus, 97.4% of the teachers who work with generic competences also pay attention to assessment (56.8% said they assessed some of the generic

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

competences or did so in some of their courses; while 40.6% responded that they assessed all of the generic competences addressed in all the courses they taught). The data collected indicate that 62.4% of all teachers in the sample used more than one method of assessment: 35.9% reported taking into account not only their own opinion, but also students' self-assessment, while 26.6% considered a third source — peer-assessment. To add two final elements to this general picture, 97% of teachers indicated that they informed their students on the first day of the course about the assessment system and methods used to determine their final grade for the course (criteria, indicators, assessment techniques…); and a similarly high percentage — 94.9% — reported giving their students regular formative feedback throughout the course.

The data obtained from students does not always coincide with the responses of teachers. 17.7% reported that all teachers who taught them and applied the competence-based student-centred approach, assessed the competences focused on at the end of the course. 21.6% believed this happened in nearly all of courses that follow the competence-based student-centred approach, while a further 47.5% have experienced competence-based student-centred assessment in some of the courses. On the other hand, only 25.8% of students said their teachers always took into account students' self-assessment as an additional source of assessment information; and 29.9% stated the same about peer assessment. Asked about the formative feedback received during the course the responses were more conservative than those of the teachers — 12.2% of students indicated that they were given this in all the courses, 26.7% in nearly all of the courses, and a further 54% in some of the courses.

The majority of teachers in the 21 Latin American universities appear to have consulted their students in order to verify their own estimation of student workload (see Table 4) and nearly half of the teaching staff reported that all of the teachers within the same degree programme coordinated their efforts. However, approval of the workload estimate at the level of the department or centre has been obtained by 43% only.

In contrast to this only 10% of students reported being asked about workload by nearly all of their teachers, and only 36.9% by some of the teachers. 47.7% of the sample seem never to have been consulted on the issue by any of their teachers.

Finally, in terms of the actions taken in order to support reform, more than half of the teaching staff seem to have had an opportunity to attend staff development courses (60.3%) and in most of these cases they were able to choose from more than one option (56.6%), yet less than half of the sample reported having had access to continuous guidance and support to help them implement a competence-based student-centred approach (42.2%).

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Table 4

Actions aimed at defining the total students' workload for the courses (considering the time spent by students working both in class and outside the classroom)

Actions aimed at defining students workload	Yes	No
I have compared my perception with the students	67.9%	32.1%
It has been approved by my department /centre	43.0%	57.0%
It has been coordinated with the rest of teachers of the same degree programme	44.7%	55.3%

A further key change is that of the attitudes, recognizing the value and the advantages of a competence-based student-centred approach. Teachers and students were asked two series of questions about (1) their perception of the influence a competence-based student-centred approach had on different aspects of university education, and (2) their perception of the new approach in comparison with a content-based approach.

As can be seen in Table 5, both teachers and students seem to be convinced of the merits of the new approach: it helps students achieve better academic results and develop new abilities, values, attitudes, etc. Teaching and learning approaches are more active and diverse. Students are more motivated and engaged; they understand the new approach and they do not share the common misconception about the content loss often erroneously associated with a competence-based student-centred approach.

At the same time, teachers are conscious of the greater effort demanded from them, and both they and students recognise that students are also required to do more themselves if a competence-based student-centred approach is adopted.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Table 5

Attitudes towards the competence-based student-centred approach: how the competence-based student-centred approach is perceived to influence the teaching and learning process. Point of view of teachers and students.

With the competence-based student-centred approach…	Teachers		Students	
	Disagree	Agree	Disagree	Agree
Better academic results are achieved	12.6%	87.4%	7.9%	92.1%
The process has become less demanding for the students	66.2%	33.8%	59.7%	40.3%
Students can develop new abilities, new values, new attitudes, etc.	8.8%	91.2%	6.2%	93.8%
Students are more confused with the new learning system	72.2%	27.8%	63.0%	37.0%
Students are more interested and involved	27.8%	72.2%	21.9%	78.1%
A much greater effort is required from the teaching staff	14.8%	85.2%	Students were not asked this question	
A much greater effort is required from the students	28.5%	71.5%	25.2%	74.8%
Active methodologies and the new methods of teaching and learning have been incorporated	11.0%	89.0%	Students were not asked this question	
Conceptual content has been lost	71.3%	28.7%	65.2%	34.8%

A further question that asked teachers and students to compare competence-based and content-based approaches further confirms the clear preference of the two groups for competence-based student-centred teaching and learning (see Table 6). The majority of respondents from both groups attributed considerably greater merit to the competence-based approach on all of the six parameters included in the questionnaire.

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Table 6

Competence-based student-centred approach versus contents-based approach from the point of view of teachers and students.

(With) the competence-based student-centred approach	Teachers		Students	
	Disagree	Agree	Disagree	Agree
Improves the student's personal development	6.7%	93.3%	6.3%	93.7%
Improves the student's civic education	21.5%	78.5%	18.8%	81.2%
The graduates are better prepared and receive a more complete education	19.0%	81.0%	13.8%	86.2%
Students are more adequately prepared for their future professional activity	13.1%	86.9%	10.7%	89.3%
Is more linked to the labour market	19.4%	80.6%	17.9%	82.1%
Permits students to obtain a more international education	23.6%	76.4%	17.8%	82.2%

VII. **Discussion**

We will first comment on the very fact that this study has been feasible, interpreting this as indirect evidence of the impact. After this we will revisit all of the findings through the prism of the three types of Tuning impact which were outlined in Section 1: (1) the impact on the attitudes and values — the clear understanding of the importance of the shift in approach; (2) the impact in terms of creating a sustainable support system — ensuring the conditions necessary for successful implementation of a competence-based student-centred approach at the institutional level; and (3) impact visible at the level of teaching, learning and assessment in the classroom — impact that students can perceive and benefit from the changes directly.

The fact that this study was able to obtain such a high level of response is a first indication of long-term Tuning impact. Conducted after completion of the project and completely dependent on the voluntary participation of all the respondents, the response to the study is clear evidence of continued commitment within the institutions involved. The response rate (83.1% in terms of institutions and 100% in terms of countries for Stage One; and

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

77.8% in terms of institutions and 100% in terms of countries for Stage Two, and the fact that the total number of Stage Two respondents exceeded the stipulated minimum numbers for each of the three categories of respondents) illustrates this commitment. In qualitative terms, what we have seen is a clear interest in the topic of improving higher education, a strong will to learn more about and understand better the implementation processes, to share lessons learned and best practices, thus continuing to learn together across subject, institutional, and national borders. The communities of learning created within Tuning Latin America projects are, thus, very much alive and might be ready to explore new means of collaborative learning.

Having made this important general comment, we proceed to the first type of expected Tuning impact, that of developing new attitudes and values and acquiring a clear understanding of the importance of the change in approach to university education. Table 5 shows how highly valued a competence-based student-centred approach is in general among both teachers and students. The results students achieve through the learning process are markedly better, richer — students can develop new abilities, values, attitudes, etc. — and students are more motivated ("more interested and involved"). There is agreement between and among the two groups and the level of agreement is above 87% with respect to the first two aspects, and above 72% in the three of them.

Table 6 reflects what Stage Two respondents think of a competence-based student-centred approach, as opposed to a content — or factual-knowledge — focused one. If the understanding of the importance of change has been achieved, it is here that a clear preference for the new approach should be seen. This is, indeed, what happens. Not only do teachers, and students, unanimously see a competence-based approach as leading to each of the listed positive results in terms of students' learning (76.4% being the lowest agreement level and 84.3% the mean). What is even more interesting is the general picture which emerges. The competence-based student-centred approach adopted appears to be more beneficial for some of the most important aspects of higher education than a content based one: it helps students become better persons, better citizens of their countries and of the world and increases student employability — contributing in this way to three of the central goals of higher education in general. This suggests that, at least in the 21 Latin American universities that participated in the second Stage of the research study, the Tuning projects could be considered to have achieved the first intended impact.

The second intended impact of the Tuning Projects — as a result of a clear understanding of the value of competence-based student-centred

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

learning — is that of institutional commitment that supports and promotes the desired changes not only during but also after the project lifecycle. In an optimal scenario academic administrators would have created the conditions necessary for implementing the new approach. They would have also ensured continuous support for teachers throughout the process of change. This is the impact teachers would feel directly, while students could only perceive it indirectly — that is, whether teachers do change their approach thanks to the indispensable conditions being in place.

Not all of the conditions necessary for the reform to take place depend on the university authorities, but the figures reported in Section 5.3 show that in the case of the 21 institutions external factors (of favourable policy and sufficient autonomy of the universities) were present as well. Yet, academic administrators have played their role as well. To begin with, dissemination of Tuning ideas and agreements (e.g. lists of competences) was done successfully in all of the institutions. Second, guidelines and other supporting documents have been created at more than 86% of the institutions, and, once again, disseminated, with a high level of success. Third, staff development activities were designed and implemented, even if possibly not to the optimal level. Fourth, having concrete persons in charge of monitoring the change process seems to be a common practice across these universities. Fifth, while financial support could have been stronger, there is a net perception that the leadership has been adequate and that academic authorities have been engaged in stimulating and supporting the change (see Table 3). The agreement between the two groups of respondents (teachers and academic executives) on this question should be highlighted once again. Finally, we would like to observe that academic authorities appear to be realistic and critical, yet committed to promoting the change. They are fully aware of the resistance of some teachers and they are also more aware (than teachers themselves) of the fact that teachers need more staff development and preparation. Even if more could be done in terms of staff development, for example, leadership is not preceived as lacking in these 21 institutions; rather, it could be argued that the university authorities are leading and supporting the change.

The overall situation in these institutions is very positive and the university authorities and staff are probably well aware of what further action needs to be taken. Given their overall commitment, this action might be a simple question of time (and possibly a slightly less simple question of funding).

Finally, we should look at the level of impact on teaching, learning and assessment, perhaps the most evidently expected one, yet possibly the less

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

easy to achieve. A vast majority (91.7%) of the institutions surveyed in Stage One reported noticeable changes in this domain in at least one aspect and at the level of at least one particular subject area. More specifically, the majority of institutions reported the introduction of a competence-based student-centred approach when revising or creating curricula, study programmes or plans, and to have changed teaching, learning and assessment methods appropriately (75.9% in each case). Both of the aspects can be modified within a subject area domain and might not require a centralized effort (although a number of universities said such changed had been introduced at the level of the whole institutions), unlike for example the introduction of a system of credits based on the students' workload.

Stage Two data demonstrate that in the 21 sample institutions a competence-based student-centred approach is seen to work, if not in all, at least in a considerable number of courses within the degree programmes chosen as examples. This claim by teachers is largely corroborated by students. Of particular interest for us here is the fact that 67.1% of teachers who focus on generic competences work with those agreed upon in Tuning. The Tuning competence lists must, therefore, be familiar to at list 67.1% of teachers in these institutions, a figure which greatly exceeds the number of teachers who had been involved in the Tuning Latin America projects directly during the project lifecycle.

Two central issues indicative of the level of implementation of a competence-based student-centred approach, but which often take longer to embed, are assessment of competences and the calculation of student workload. Indeed, more discrepancies are noticeable between teachers' and students' answers with respect to these two aspects and thus degree of implementation might be lower than for other aspects. In other words, this requires further work. However, the figures obtained suggest that all of these universities are certainly on the way to achieving both goals, and their progress can be plausibly attributed to their participation in the Tuning Latin America projects.

VIII. **Conclusion**

To sum up, this study demonstrates that Tuning has had an evidence based impact in at least 21 higher education institutions in 11 Latin American countries and 15 subject areas. All the three types of impact which could be expected appear to be supported by the evidence gathered in this study. Classroom practices have been modified to introduce a competence-based

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

student-centred approach. It is also clear that strong positive attitudes towards this approach have been developed by different stakeholders. Both teachers and students (the main intended beneficiaries of the new approach within institutions of higher education) seem to highly appreciate the benefits of competence-based teaching, learning and assessment, despite being fully aware of the complexity of the changes.

It is important, however, to recall two aspects of the research reported in this article: the first two stages were quantitative in nature, Stage One was exploratory while Stage Two focused on cases of most successful implementation. This suggests two further steps that might need to be undertaken in order to understand how a competence-based student-centred approach can be implemented and what successful implementation depends on. Firstly, a qualitative study of some of the 21 institutions in Stage Two could be conducted. The main question here would be that of how the implementation process developed in these universities: how they moved from their participation in Tuning projects, from initiating debate about the need of change, to actually implementing the new approach, changing the mindsets of the different stakeholders, overcoming the barriers, etc. What were the best practices or solutions identified by the competence-based student-centred approach advocated in these institutions that permitted them to achieve this goal? This qualitative third stage would permit the examination of the nature of contexts favourable for the implemention of a radical change in approach and perhaps identify elements or patterns within institutional cultures either necessary for or associated with successful implementation. Those factors which are context-independent, if any, would be of special relevance for helping other universities achieve the similar goals.[37]

Secondly, it is equally important to find out why other universities have been less successful or unsuccessful in implementing the results of the Tuning projects. What limited their ability to redesign their curricula? What prevented these institutions from achieving the same results? Can any of these decisive factors be controlled by any of the three groups (academics executives, teachers and students)? Or could a further international project which would target particular aspects critical for successful implementation (teaching and learning activities, assessment methods, etc.) help resolve those difficulties which these universities have not managed to overcome? A further research study might be necessary in this case.

[37] Even if any generalisations or attempts at transferring enabling elements from one context to another must be made with great caution.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

To conclude, a first step has been made towards exploring the impact Tuning has had in one of world regions where Tuning projects have been completed. The results obtained in Latin America are encouraging in terms of establishing a relation between participation in a Tuning project and advancing towards fully implementing a competence-based student-centred approach, with all that this entails. Further studies must, however, be conducted to answer the new questions which have arisen, to explore cases of successful implementation in more detail, and to draw a comparative picture with other regions of the world higher education academics have participated in Tuning projects.

Bibliography

"What is impact evaluation?", last modified 2011, http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTISPMA/0,,menuPK:384339~pagePK:162100~piPK:159310~theSitePK:384329,00.html

Altbach P. G., Reisberg L., and Rumbley L.E. (2009) Trends *in Global Higher Education Tracking an Academic Revolution*. A Report Prepared for the UNESCO 2009 World Conference on Higher Education.

Austrian Development Agency, *Guidelines for Project and Programme Evaluations*. Vienna: Austrian Development Agency, 2009.

Beneitone, Pablo; Esquetini, César; González, Julia; Marty Maletá, Maida; Siufi, Gabriela, and Wagenaar, Robert, eds. *Reflection on and Outlook for Higher Education in Latin America. Bilbao: University of Deusto* – University of Groningen, 2007.

Beneitone, Pablo; González, Julia and Wagenaar, Robert, eds. *Meta-profiles and profiles: a new approach to qualifications in Latin America*. Bilbao: University of Deusto, 2014.

Garbarino, Sabine and Holland, Jeremy. *Quantitative and Qualitative Methods in Impact Evaluation and Measuring Results,* (2009); accessed at http://www.gsdrc.org/docs/open/EIRS4.pdf

Newcomer, Kathryn E.; Hatry, Harry P., and Wholey, Joseph S., "Planning and Designing Useful Evaluations." In *Handbook of Practical Program Evaluation*, edited by Kathryn E. Newcomer, Harry P. Hatry, Joseph S. Wholey, 5-29. San Francisco: Jossey-Bass, 2010.

OECD, Glossary of Key Terms in Evaluation and Results Based Management. Paris: OECD Publications, 2010.

———, *Outline of Principles of Impact Evaluation*, (n.d.), http://www.oecd.org/dac/evaluation/dcdndep/37671602.pdf

Stern, Elliot, *Impact Evaluation: A Guide for Commissioners and Managers*. London: Bond for International Development, 2015.

Stern, Elliot; Stame, Nicoletta; Mayne, John; Forss, Kim; Davies, Rick, and Befani, Barbara, *Broadening the Range of Designs and Methods for Impact Evaluations*. 2012.

Wheebox, People Strong and the Confederation of Indian Industry (2014) *The India Skills Report* https://wheebox.com/wheebox/resources/IndiaSkillsReport.pdf

About the Authors

PABLO BENEITONE (pablo.beneitone@deusto.es) is Director of Tuning Academy at the University of Deusto (Spain). During most of his professional and academic career since 1994 onwards, he has been responsible for managing international higher education projects at university and national level. At the University of Deusto he was Project Manager of Tuning Latin America and Tuning Africa, and was involved in other regional programmes, Russia, China, and Europe, supported by European Commission. He has published extensively on the 'Tuning Methodology' and given Tuning-related conference presentations in more than 25 countries. Mr. Beneitone holds a Bachelor degree in International Relations and a Master in International Cooperation from Universidad del Salvador (Argentine). His doctoral research focuses on the internationalisation of curriculum. To access the full CV, please copy and paste this URL into your browser: http://www.tuningjournal.org/cv/Pablo_Beneitone.pdf.

MARIA YAROSH (mariayarosh@deusto.es) works in the Research and Staff Development lines of the Tuning Academy at the University of Deusto (Bilbao, Spain). Parallel to this, she participates in international education and research projects. Her collaboration with Tuning started with the preparation of the Tuning Russia project (2009). Maria Yarosh holds a Specialist degree in Linguistics and Translation from the Institute of Foreign Languages (St. Petersburg, Russia), an MA degree in Lifelong Learning: Policy and Management from the Institute of Education, University of London (UK) and a PhD in Education from the University of Deusto (Spain).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 187-216
doi: 10.18543/tjhe-3(1)-2015pp187-216 • http://www.tuningjournal.org/

Guidelines for Authors

Guidelines for Authors

VERSION 1ST MAY 2015

General Information

The *Tuning Journal for Higher Education*, TJHE, is an international peer-reviewed journal publishing in English original research studies and reviews in all aspects of competence-based, student-centred, and outcome-oriented education reforms at university level across the globe. The submitted manuscript should not have been previously copyrighted or published in any form, including electronic media and databases, and must not be currently under consideration for publication elsewhere.

These Guidelines should be used with reference to TJHE Ethical Guidelines for Publication. Both documents are available at the web page of the Journal (http://www.tuningjournal.org/).

Manuscript Preparation

To expedite the review process, please format your manuscript as follows:

1. Prepare your manuscript as a single editable Microsoft Word or Open Office document with line numbering, using the template downloadable from the web page of the Journal (http://www.tuningjournal.org/index.php/tuning/about/submissions#onlineSubmissions). The file should include the complete text, references, tables and figures. All revised manuscripts should again be sent as a single editable document.
2. Manuscripts must be written in either UK English or US English consistently and include a 100-300 word abstract. The title page should include authors' affiliations plus the email address of a single corresponding author. The Chicago Manual of Style (CMOS), 16th edition, should be used as a reference for manuscript preparation (www.chicagomanualofstyle.org/home.html).
3. Format of references, notes, and bibliography list.
   a) Authors are required to format their citations and references using the 'Notes and Bibliography' system of the CMOS, 16th edition (http://www.chicagomanualofstyle.org/tools_citationguide.html) and not its 'Author-date' system.
   b) Note references must be numbered in superscript format in the text and arranged numerically (in the order they appear in the text) at the bottom of each page, in line with the CMOS 'Footnotes' system.
   c) 'Notes' include complete bibliographic information when cited for the first time. For subsequent citations of the same source, shortened versions are preferred.
   d) The 'Bibliography' list includes all and only sources cited in the 'Notes' and provides complete reference information.

e) 'Bibliography' entries are to be arranged alphabetically by (first) author's last name following the CMOS guidelines.

f) Microsoft Word (2010 and later) can be used with such software as "EndNote", "RefWorks", "Reference Manager", and "Zotero", to simplify the task of managing citations and references according to the recommended CMOS.

4. Authors are asked to provide between 5 and 10 keywords immediately following the Abstract.
5. Authors are reminded that it is their sole responsibility to ensure that the use of English in their manuscripts is either UK English or US English and that they can resort to professional editing services prior to submission.
6. Please ensure that all the characters and special characters in the text, tables, figure legends, footnotes and references are in a single typeface and point size – such as 12 pt Times New Roman. Once a manuscript is accepted, a copy editor will decide the typeface and size of the different elements of the article.
7. Please submit all figures or photographs as separate jpg or tif files with distinct characters and symbols at 500 dpi (dots per inch). Tables and equations should be in an editable rather than an image version. Tables must be edited either with Microsoft Word or Open Office. Equations must be edited with the appropriate Equation Editor. Tables, table captions, figures and figure captions should be appended after the 'Bibliography' section, as indicated on the standard template for manuscript preparation (http://www.tuningjournal.org/index.php/tuning/about/submissions#onlineSubmissions).
8. Type your manuscript single-spaced. This will conserve paper and makes it easier for reviewers to handle.
9. Manuscripts should normally be between 5,000 and 12,000 words including notes, references, captions, and diagrams. Diagrams should be reckoned at the equivalent of 500 words if they occupy a full page and proportionately less if smaller. Longer articles require editorial approval.
10. Authors of manuscripts should each submit a biographical note of 150-200 words. The note must contain the following information:
    - Full Name
    - E-mail address
    - Affiliation
    - Current post
    - Relevant experience
    - Principle fields of research
    - Highest academic qualification

Online Submission

Manuscripts should be submitted online via the *Tuning Journal for Higher Education* online manuscript submission and review system at <http://www.tuningjournal.org/>.

Manuscripts will be processed using the Open Journal Systems software which allows authors to track the progress of their manuscript.

In OJS, editorial correspondence related to a manuscript is reserved for the person who actually submits the manuscript in question. In cases of various authors, the

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 219-221
http://www.tuningjournal.org/

submitting author is the sole co-author with access to the manuscript and related files and correspondence. It is therefore important that the corresponding author, referred to as "Principal contact for editorial correspondence" in OJS terminology, be the actual submitter of that manuscript.

Authors are invited, in their covering email, to provide the names of three well-qualified reviewers. Current e-mail addresses must be provided for all suggested reviewers. They should also supply the email address of a single author who will act as corresponding author.

A copyright transfer agreement must be signed after acceptance but before publication. To that effect, they receive in due course a standard copyright assignment form from the Managing Editor of the Journal.

Review Process

Manuscripts not conforming to journal guidelines will be returned to authors without evaluation.

Manuscripts accepted for review will be handed to the Editor, or a member of the Editorial Advisory Panel, who will assign them to external reviewers.

The Editor will prepare a decision letter based on the comments of the reviewers and the recommendation of the Advisory Editor, which will be sent to the corresponding author by email.

It is our intention that all non-reviewed manuscripts will be sent back within 21 days of submission and decision letters for manuscripts will be sent within 8 weeks of receipt.

Publication Cost

Currently, no charges for submission and publication are applicable.

More information and correspondence

Detailed and updated information is available at <http://www.tuningjournal.org/>. Editorial correspondence should be sent to the Editor (Luigi F. Donà dalle Rose, <dona@pd.infn.it>) and or Managing Editor (Ladislas Bizimana, <ladislas.bizimana@deusto.es>). The mailing address is the following:

Ladislas Bizimana
Managing Editor, TJHE
Journals Manager
Publications Service
DEIKER-OTRI - Knowledge Transfer Office
University of Deusto
Avenida de las Universidades, 24
48007 Bilbao, SPAIN
Tel: (+34) 944 139 003 (ext. 3048)
Email: ladislas.bizimana@deusto.es
tuningjournal@deusto.es

TJHE
Ethical Guidelines
for Publication

TJHE Ethical Guidelines for Publication

FINAL VERSION (MARCH 2015)

Tuning Journal for Higher Education (TJHE), Tuning Journal in short, is an international journal publishing in English original research studies and reviews in all aspects of competence-based, student-centred, and outcome-oriented education reforms at university level across the globe. It is published by the University of Deusto's Publications department on behalf of the International Tuning Academy (Tuning Academy in short), a jointly managed project of the Universities of Deusto (Spain) and Groningen (The Netherlands). The Journal, essentially an open access, online and peer-reviewed publication, is committed to maintain the highest ethical standards. Hence, the involvement of any stakeholder in any function connected with TJHE, including acting as an editor, the reviewing of manuscripts, the management and production of the Journal and the authorship and submission of manuscripts implies acceptance of and adherence to **TJHE Ethical Guidelines for Publication**.

* The term *Editor(s)* as used below refers to Editors, Advisory Editors, Guest Editors, and Editorial Board members when delegated to serve in an editorial capacity.

1. Publishers, Managing Board, Editorial Board

1.1. The Editorial Board is appointed by the Tuning Academy in consultation with the Universities of Deusto and Groningen.

1.2. The Editorial Board is responsible for setting policy, appointing the Editor and Advisory Editors of the Journal.

1.3. The Editor is responsible for ensuring that publication policies set by the Editorial Board are carried out.

1.4. The Management Board is appointed by the Tuning Academy in consultation with the Universities of Deusto and Groningen.

1.5. The Managing Board is responsible for the commercial management of the Journal and appointing a Managing Editor.

1.6. The Managing Editor is responsible for ensuring that the commercial policies set by the Management Board are carried out.

1.7. Members of the Editorial or Management Boards or employees and, or members of the Tuning Academy should not intervene in or comment on editorial decisions on individual manuscripts.

2. Editors, Advisory Editors, and Guest Editors

2.1. *Editors* of the Journal and Specialist Volumes are expected to carry out editorial duties in a manner consonant with policies set by the Editorial Board.

2.2. The Editor has full responsibility, which he/she may delegate to an Advisory Editor, for editorial and technical decisions on Journal and specialist volume content.

2.3. *Editors* will give manuscripts unbiased consideration.

2.4. *Editors* should process manuscripts expeditiously.

2.5. The Editor has sole responsibility for acceptance or rejection of a manuscript. Manuscripts should have peer review, but the Editor may reject any manuscript for other causes (inappropriate for journal, clearly of poor quality, contents previously published elsewhere, etc.)

2.6. The Editor should not disclose information about submitted manuscripts except to reviewers, Advisory Editors, Editorial Board members, and staff at the University of Deusto's Publications department. Information about a manuscript may be shared after electronic publication (e.g., news releases or inclusion in a list of contents, etc.).

2.7. Manuscripts submitted by an *Editor* should be delegated to another Advisory Editor or Editorial Board member.

2.8. An *Editor* should not handle manuscripts for which there is a real or perceived conflict of interest. Examples include, but are not restricted to, past (within the last 5 years) or current collaboration, employer or employee, close friend, family relationship, institutional relationship, past or present graduate advisor or advisee, someone with whom the reviewer has had a past or on-going academic controversy, or situations where the *Editor* could stand to gain or lose economically or in any other way by publication or rejection of the manuscript. Editorial responsibility should be delegated to another Editor, Advisory Editor, or Editorial Board member.

2.9. An *Editor* must not use information, data, theories, or interpretations of submitted manuscript in her/his own work unless that manuscript is in press, published or the author has given permission to do so.

2.10. If an *Editor* is presented with convincing evidence that the main substance or conclusions of a publication is/are erroneous, he/she should facilitate publication of a report (e.g., correction, follow-up manuscript, or other appropriate means) pointing out the error and, if possible, correcting it. The report may be written by the person who discovered the error or by the original author. The original publication does not disappear from the published record.

3. Authors and Co-authors

3.1. Manuscripts should contain original, new results, data, ideas and/or interpretations not previously published or under consideration for publication elsewhere (including electronic media and databases).

3.2. Authors should be encouraged to avoid fragmentation of their work where practical, so that the submitted manuscript is as comprehensive and authoritative as possible.

3.3. Authors should inform the Editor of related manuscripts under consideration elsewhere and provide copies if requested.

3.4. Fabrication of data, results, selective reporting of data, theft of intellectual property of others, and plagiarism are unethical practices and unacceptable.

3.5. Information obtained privately (e.g., in conversation, correspondence, or discussion with third parties) should be avoided as it is not in the public domain and is thus unverifiable. If considered necessary, it should not be used or reported in a manuscript without explicit permission from the party with whom the information originated. Information obtained in the course of confidential services (e.g., refereeing manuscripts or grant applications) should be treated similarly.

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 225-228
http://www.tuningjournal.org/

3.6. Manuscripts will contain proper citation of works by others, especially publications of the original hypotheses, ideas, and/or data upon which manuscript is based or addresses.

3.7. Authorship

a) Authorship should be limited to those who have made significant contributions to the concept, design, execution or interpretation of the work reported in a manuscript; others who have contributed should be acknowledged;

b) Author order should be agreed on by all authors as should any changes in authors and order that occur while the manuscript is under review or revision. Changes in authorship must be submitted to the Editor in writing and must be signed by all authors involved.

c) Authors and co-authors should review and ensure the accuracy and validity of results prior to submission; co-authors should have opportunity to review manuscript before submission.

3.8. Authors should reveal to the Editor any potential conflict of interest (e.g., a consulting or financial interest in a company) that might be affected by publication of the results contained in a manuscript. The authors should ensure that no contractual relations or proprietary considerations exist that would affect the publication of information in a submitted manuscript.

3.9. Authors are encouraged to disclose major funding sources (e.g., government agencies, private foundations, private industry, and universities) for reported research.

4. Reviewers

4.1. A reviewer should disclose real or perceived conflict of interests to the Editor before agreeing to write a review. Examples include, but are not restricted to, past (within the last 5 years) or current collaboration, close friend, employer or employee, family relationship, institutional relationship, past or present graduate advisor or advisee, someone with whom the reviewer has had a past or on-going scientific controversy, or situations where the reviewer could stand to gain or lose economically or in any other way by publication or rejection of the manuscript. The Editor will decide if the conflict is severe enough to prevent the reviewer from writing a fair, objective review.

4.2. A reviewer should decline to review a manuscript if she/he feels technically unqualified, if a timely review cannot be done, or if the manuscript is from a competitor with whom the reviewer has had an acrimonious professional relationship or a conflict of interest as defined above (section 4.1).

4.3. Reviewers should be encouraged, but not required, to sign reviews. The Editor will preserve anonymity of reviewers should a reviewer elect to remain anonymous.

4.4. Reviewers must treat the manuscript as confidential.

4.5. Reviewers must ask the Editor for permission to discuss the paper with others for specific advice, giving names and reasons for such consultation.

4.6. Reviewers must not pass the manuscript to another to carry out the review without permission from the Editor.

4.7. Reviewers must not use information, data, theories, or interpretations of the manuscript in their own work unless that manuscript is in press, published or the author has given permission to do so.

4.8. Reviewers should clearly support and justify the basis for their review analysis.

4.9. Reviewers should alert the Editor to similar manuscripts published or under consideration for publication elsewhere in the event they are aware of such. However, it is the responsibility of the Editor, not the reviewer, to decide on the proper course of action once so informed.

5. Citation Manipulation

5.1. Citation manipulation is considered unethical. Manipulation may include adding citations not contributing to a manuscript's content or solely aiming at increasing an author's or a journal's citations.

6. Sanctions

6.1. Suspected breaches of this policy may be handled by the Editor or may be forwarded to the Editorial Board for review and recommendation.

6.2. If an *Editor* is determined to have violated the **TJHE Ethical Guidelines for Publication**, the matter will be referred to the Editorial Board.

6.3. If an author is determined to have violated the **TJHE Ethical Guidelines for Publication**, TJHE reserves the right to impose sanctions, which may include restriction from further consideration of accepting the author's work, retraction of a published paper, or withdrawal of a submitted paper.

Date: 16 March 2015

Approved by the TJHE Editorial Board and signed on behalf of the Tuning Academy by:

Pablo Beneitone
Director, Tuning Academy (Deusto)

Robert Wagenaar
Director, Tuning Academy (Groningen)

Acknowledgements

Many sources were consulted in preparation of these ethical guidelines. However, the Editorial Board of the TJHE would like to acknowledge in particular principles outlined in documents by C.O.P.E. (The Committee on Publication Ethics, http://publicationethics.org/resources/guidelines) and the Geological Society of America (www.geosociety.org/pubs/ethics.htm).

Tuning Journal for Higher Education
© University of Deusto. ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 225-228
http://www.tuningjournal.org/

Contact Details

Tuning Journal (www.tuningjournal.org)

Editorial Office

Ladislas Bizimana
Managing Editor, TJHE
Journals Manager
Publications Service
DEIKER-OTRI - Knowledge Transfer Office
University of Deusto
Avenida de las Universidades, 24
48007 Bilbao, SPAIN
Tel: (+34) 944 139 003 (ext. 3048)
Email: ladislas.bizimana@deusto.es
tuningjournal@deusto.es

International Tuning Academy (www.tuningacademy.org)

Deusto International Tuning Academy (DITA)

University of Deusto
Avenida de las Universidades, 24
48007 Bilbao, SPAIN
Tel: (+34) 944 139 467 (direct)
Tel: (+34) 944 139 003 (ext. 3147)
E-mail: dita@deusto.es

International Tuning Academy Groningen

University of Groningen
Oude Kijik in't Jatstraat, 26
9712 EK Groningen, THE NETHERLANDS
Tel: (+31) 503 636 059
E-mail: tuningacademy@rug.nl

 ISSN: 2340-8170 • ISSN-e: 2386-3137. Volume 3, Issue No. 1, Novenber 2015, 229
http://www.tuningjournal.org/

Tuning Academy

Growing Tuning seeds

Tuning Journal Volume 3, Issue No. 1, November 2015

Contents

Implementation of Competence-Based Approach: Stories of Practices and the Tuning contribution to academic innovation
Anna Serbati

Impact of Erasmus mobility for study on the development of Tuning Europe generic competences, as assessed by outgoing and incoming students in a large university: a revealing analysis
Luigi F. Donà dalle Rose

Changing paradigms: towards competency-assessment in admission to master's programmes in Europe: a review
Kees Kouwenaar

A 21st Century Imperative: Integrating Intercultural Competence in Tuning
Darla K. Deardorff

Competencies, Learning Outcomes and Forms of Assessment: the Use of Tuning Methodology in Russia
Artur Demchuk, Yevgeniya Karavaeva, Yelena Kovtun, and Svetlana Rodionova

Tuning impact in Latin America: Is there implementation beyond design?
Pablo Beneitone and Maria Yarosh

Deusto
University of Deusto

university of groningen