

# An Interactive Online Course to Raise Awareness about Diversity

Guido Rößling  
roessling@acm.org  
TU Darmstadt, CS Dept.  
Darmstadt, Germany

Felix Broj  
f.broj@apaed.tu-darmstadt.de  
TU Darmstadt, Pedagogy Dept.  
Darmstadt, Germany

## ABSTRACT

Diversity is sometimes understood narrowly, by focusing on only one or two categories, such as gender or race. Following the concept of intersectionality, there are far more aspects to diversity that can affect students' success, in some cases only indirectly or subtly. We present a small self-contained online course for raising awareness of some additional aspects of diversity, without admonishing users or prescribing attitudes.

## CCS CONCEPTS

• **Social and professional topics** → **Computer science education**;

## KEYWORDS

online course, interactive, self-training, diversity, awareness

### ACM Reference Format:

Guido Rößling and Felix Broj. 2018. An Interactive Online Course to Raise Awareness about Diversity. In *Proceedings of Innovation and Technology in Computer Science Education (ITiCSE'18)*. ACM, New York, NY, USA, 1 page. <https://doi.org/10.1145/nnnnnnnn.nnnnnnnn>

## 1 AN INTERACTIVE ONLINE COURSE ABOUT DIVERSITY

Diversity has, as the name indicates, many different aspects. Gender and racial background, while arguably the most common aspects, are only facets of diversity. Other concepts of diversity include, but are not limited to, disabilities, the sense of national, ethnical and/or cultural identity, religious backgrounds, social and economic background, sexual disposition, political views, and finally age.

In many cases, courses or programmes seem to expect an “average student” to which certain attributes are ascribed: not having a disability, a citizen of the university's nation, adhering to the predominant local religion, coming from a financially stable background, heterosexual, and of “typical age” for a student. In other words, the “average student” is essentially the “average John or Jane”, comparable to “all others of the same age”. This is in itself a fallacy, and the reality is of course far more complex and diverse than one may anticipate.

Our course presents a set of six “personas” representing fictional characters. The personas are not based on actual students, but are assembled based on a large university survey. Thus, students just like our personas are likely to exist. We have made sure that the personas diverge to varying degrees from stereotypical expectations of a “typical” student. Each of these personas provides some background information, including the given name, age, information about their sex, gender and desire, national, ethnic and cultural background, religion, parents, field of study, and a few lines of additional background information. In essence, each of these fictional personas should feel like someone one could meet on campus.

The user is then randomly assigned one of these personas and asked to rate 20 statements for this persona with agreement, undecided or disagreement. Each answer is assigned 2, 1 or 0 points, thus up to 40 points can be gathered by a student that perfectly agrees with each statement. The statements were developed from a related diversity method and indicate—though in several cases subtle—differences in students' lives on campus, for example based on financial backgrounds, the relationship to parents, or social obligations that cut into the time available for studying (or leisure). Both the avatar for the persona assigned to the user and six additional other personas—separate from those from which the user persona is chosen—progress from the bottom of the screen towards the top, depending on the respective answer score. In this way, the user can easily see that the results for the personas based on these statements is highly uneven: at the end, the six other personas will have a score between 13 and 37, with the user's persona typically falling somewhere between these extremes. The “answers” for the six other personas was determined by averaging the estimations of the likely answer from colleagues and pedagogy students.

The course closes with a chance to reflect on the different starting points of a diverse student body. Teaching assistants and academics are requested to make sure that the diversity of our students—usually through no fault or decision of their own—does not have a negative impact on their academic success. The course shall also be used in our forthcoming trainings for student teaching assistants. We hope that the course will encourage students to reflect on the different characteristics of other students, and open their minds to diversity aspects and the advantages—and disadvantages—that certain situations or societal expectations convey.

The course is available at <http://bit.ly/2lINaXx> for viewing and commenting. Currently, it is only available in German, but we plan to provide an English version in time for ITiCSE'18.

## ACKNOWLEDGMENTS

This work was funded by the German Federal Ministry of Education and Research as part of the “Competence Development through Interdisciplinary and International Cooperation from the Start (KI<sup>2</sup>VA)” project.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from [permissions@acm.org](mailto:permissions@acm.org).

ITiCSE'18, July 2–4, 2018, Larnaca, Cyprus

© 2018 Association for Computing Machinery.

ACM ISBN 978-x-xxxx-xxxx-x/YY/MM...\$15.00

<https://doi.org/10.1145/nnnnnnnn.nnnnnnnn>