

## **Article Albanian Studies Days 2021**

***Title: Citizenship education, international competences and extended reality: Immerse yourself***

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### **Introduction**

Higher education supports students in acquiring competences; a mix of knowledge, skills and attitudes. Experience has shown that it is precisely attitude and skills that ensure a better connection to the labor market, in whatever sector in whatever country.

This article examines the developments and experiences in authentic learning environments in relation to international aspects of citizenship education. It discusses the possibilities and limitations of the use of extended reality in general and in this context.

The author links this to the educational and societal developments in Albania and her home country The Netherlands, during and after COVID-19, and shares her thoughts on the needs for continuing attention on new forms of citizenship education. The pandemic makes it necessary to re-consider past self-evident interpersonal relations and international relations.

After a short introduction on the concepts of citizenship education, internationalization, and extended reality, the article first digs into the relevance of competence based learning and authentic learning-environments, in order to highlight the importance of learning styles and learning environments.

The inventory of the possibilities and limitations of the use of extended reality in the context of citizenship education and internationalization, is followed by an overview of the current situation in Albanian and Dutch societies and higher education.

The focus is on the curriculum and class-room level in higher education, so on knowledge exchange at practitioners level, with an eye for the policy implications at other levels.

### **Citizenship education**

Citizenship education contains the personal development of reflective ability, moral compass, media literacy and international experience, as Willeke Slingerland of Saxion UAS stated during the Albanian Week of Integrity in 2020. She investigated the importance of higher education in the total system of integrity (Slingerland, 2016).

Opinions differ on which role the government should play in citizenship education and which role of educational institutions like universities should take. Integration, civil society, active citizenship are goals most people agree upon. Working on common values: that is already more difficult. One should realize that international integration, like the EU, not only

changes citizenship as such, but also the contents of national curricula, and the purpose and assumptions of citizenship education (Keating, 2009). The COE announced Competences for democratic culture during the Learning to live together conference about the future of citizenship and Human Right education in Europe (Council of Europe, 2019).

There are many theories on citizenship education and curriculum. Curtiss and Warren distinguished the following elements, already in 1973:

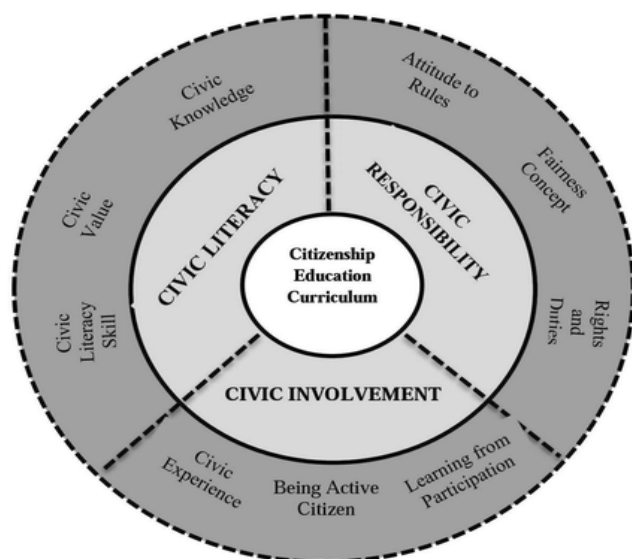


Figure 1. Citizenship education curriculum (Curtiss & Warren, 1973)

In the next section, the role of international competences are first addressed in general, and later more specifically on international citizenship education.

## Internationalization

Part of citizenship education is linked to internationalization. How is internationalization integrated in the curriculum of the university and in its organization? Preferably not as a goal as such but as a means to become a responsible, capable professional. With an open, flexible approach, ready for the world. This is what internationalization is about, and why it should have its role in the university curriculum and organization.

The European Association for International Education has a widely accepted view on internationalization. She defines internationalization as: "The intentional process of integrating an international, intercultural or global dimension into the purpose, functions, and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society." (EAIE, 2020)

It is good to realize that it is definitely more than 'something with English' or mobility. Nor are English or mobility necessary components of internationalization. Conducting a module in English, whether or not to students from abroad, does not make it internationalized.

Conversely, a module or training can be internationalized without switching to English or building in mobility (Saxion UAS, 2021).

During the COVID-19 pandemic it became apparent that international contacts are crucial, but traveling not always necessary let alone possible. There are many forms of internationalization, that are beyond the scope of the article. It is mainly to address the role of internationalization in competence development.

The main contributions of internationalization include:

- For higher education, it contributes to high quality education and research, addressing the needs of the employment market and addressing global challenges.
- For learners, it contributes to personal socialization, like working in an international classroom, online or offline. It contributes to personality development of the learner, the more general skills and awareness. It is needed for professional qualification of the learner, in the strict labor market sense.
- For society, it contributes to solving societal problems. Like contributing to more inclusive communities. Of course, it could also contribute to problems, like the environmental impact of traveling.

Internationalization in education also includes research of course. But that is not discussed in detail here, other than joint student-research activities, and the role of educators and the relevance of their professional development including research skills.

International elements used to be included in the curriculum as embedded mobility within a course, exchange mobility for individual students, networked mobility in networked curricula and courses with mobility windows and integrated mobility in joint curricula.

More and more society realizes that mobility is not always necessary. How can online cooperation, virtual mobility and (Keating, 2009) obtain the same goals? On an organization level or national level, there are different programs to support international competence development for staff and students. In the European context there is national and European funding for international cooperation, with different goals and means. Next to various Erasmus programs, Horizon2020 and the new European University Networks are worth mentioning.

### **Extended reality (XR)**

Let's move on to the next important concept. Virtual reality can be used as a tool to learn in an authentic learning environment. In this article this concept includes augmented reality, virtual reality and more.

It includes also online learning, whereby different locations are linked, or making learning place and time independent.

Extended reality is new and not new, because creativity has always been there. Transferring information and experiences to other regions or other times was done via magic lanterns, and is done in museums. Also currently, augmented reality initiatives like Humanity House in The Hague, work on site. It let the visitor experience what it is like to be a refugee.

There are many forms of extended reality, below a short impression is given:

- The Building Information Model (BIM) and Geographic Information Systems (GIS) were early examples, in construction and geography, of professional extended reality.
- Digital storytelling in marketing is widely used in companies around the globe (e.g. LEGO, Tony Chocolonely)
- Nintendo is the predecessor of the current serious gaming. Edu games and professional training games show professionals and learners how to deal with a certain situation, like a house on fire, or an animal with a behavior issue.
- Home automation is more and more common in healthcare, for instance to support elderly on a distance.
- VR/ AR devices, computers, motion capture solutions, robots, cameras, drones, are used in the link between industries, students and researchers. Google glasses is a well-known example.
- Welding simulators are getting daily practice in vocational education at various levels.

### **Competences and authentic learning environments in the curriculum**

Before going into more detail about the possible role of XR in international citizenship education, it is important to realize how learning works. A number of theories are used to share the notion of competences and the relevance of authentic learning environments in building and executing a curriculum.

**Competences** are defined as a mix of knowledge, skills and attitudes. Although knowledge is indispensable to a greater or lesser extent, experience shows that it is precisely attitude and skills that ensure a better connection between the young qualified professional in the labor market.

Some universities or university programs are more research-oriented, with an academic focus. Other courses, especially those offered by universities of applied sciences, are by definition labor market oriented. The point is that both are labor market oriented and both require a set of skills and attitude, but the content is different. So there is no real difference in approach, if we are aware of the different conditions on the general labor market and the specific labor market for scientists.

In the cognitive domain, Bloom's taxonomy distinguished different levels of learning objectives. From knowledge, understanding, application, analysis, synthesis to evaluation (Bloom, 1956). There is a never-ending debate as to whether this is sequential or not, nevertheless, the theory is widely used for teaching philosophies and strategies.

Kratwohl designed a revised version, shown in the figure below, with a more general approach. Divide skills into high and lower order skills. Create (creativity) being the highest

skill, and evaluating seen as the reflective skill. (Kratwohl, 2002)

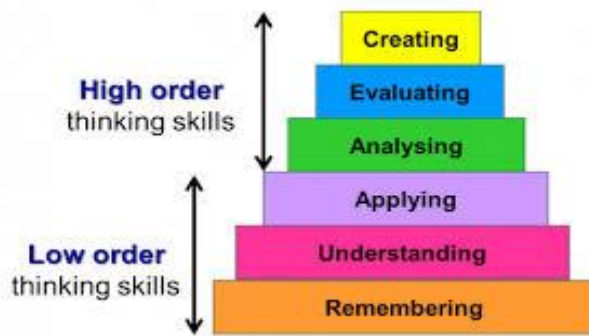


Figure 2: The taxonomy of educational objectives (Kratwohl, 2002)

Not just knowledge but also skills, are also reflected in Miller's pyramid. The following levels are used in education to assess the level of competence: knows about, knows, knows how, shows how to do. This also reflects the importance of skills. From passively acquiring knowledge to actively showing how to do it (Miller, 1990).

Awareness is important. The theory of Curtis and Warren is useful for that. They distinguish four levels. The theory is mentioned here specifically, because it also links to citizenship skills, which require conscious behavior.

1. Unconscious incompetence. A student does not understand or does not know how to do something and does not necessarily recognize the deficit. This should be recognized before moving to the next phase.
2. Conscious incompetence. Though the student does not understand or know how to do something, they recognize the deficit
3. Conscious competence. The student understands or knows how to do something. But this requires attention and concentration.
4. Unconscious competence. The student has had so much practice with a skill that it has become a second nature and can be performed easily. The skill could be taught to someone else. (Curtiss & Warren, 1973)

Interdisciplinarity is another issue, that is not addressed here in detail, but relates to complexity of situations. Disciplines need each other to solve a professional problem or to investigate a question.

In the report 'Preparing 21st century students for a global society' of NEA, there is a focus on the 4 C's: creativity, critical thinking, communication and collaboration (National Education Association, 2012).

**Curriculum development** requires an eye for the composition of competences in a curriculum, for that cause the Zelcom model is useful. Zelcom stands for Zelfstandigheid (Dutch for self-reliance) and Complexiteit (Dutch for complexity). The model is used at universities of applied sciences in The Netherlands. Independence (or self-reliance) and complexity are two axes that together determine the competence level. Important for the

qualification level of the study program, assessing assignments, determining assessment criteria and assessing student performance. A useful tool for curriculum development. In making training more relevant to the profession, and clearer also for partners in the professional field (Bulthuis, 2013). The model is also used as a quality control tool in (inter)national accreditations.

Self-reliance	C	D	E
	B	C	D
	A	B	C
	Complexity		

Figure 3: Zelcom-model (Bulthuis, 2013)

**Authentic learning environments** are key to competence based learning. In fact competence based learning requires authentic learning environments. An approach that allows students to explore, discuss and construct concepts and relationships in a context that involves a real world problem and projects that are relevant to the learner, and the professional field.

Wehlage defines five standards of authentic instruction. Higher order thinking, depth of knowledge, connectedness to the world, substantive conversation, social support for student achievement (Wehlage, 1993). The practical environments include: simulation, student created media, inquiry based learning, project based learning and peer based learning (Revington, 2018). Here the links to citizenship education are obvious.

These notions are not all new, by the way, but they form a useful overview.

Benefits of authentic learning environments include:

- a better preparation for the professional field
- learn to assimilate
- obtain problem solving skills
- learn to be flexible
- motivation for learners (and educators)

When looking at *how* students learn, Kolb distinguishes 4 different learning styles of participants in education or elsewhere (Kolb, 2005):

- Doer, is actively experimenting and gaining experience. His motto is: let's get to work. Guessing and missing is allowed in his approach.
- Dreamer, is experiencing concretely and observing reflectively. He looks in all directions and finds solutions.
- Thinker, likes reflective observation and conceptualization. He is able to reason well and likes to work independently.
- Decision maker, likes abstract conceptualizing and active experimentation. He is a problem solver.

It is important to note, that there are four moments when learning actually happens: by experiencing, by reflecting, by conceptualizing or by applying. Learners could go through the entire cycle, starting with experience.

Although many curricula at universities are very structured and well organized, they may not cover all these different learning styles. Whether one should apply the same, complete cycle every time, or one could select parts from it for certain learning units, is a question to take into account. Preferably, the overall curriculum attention should cover different learning styles, which could be included in the Zelcom model, for instance.

After the why of the learning experience, the authentic learning environments are chosen to show *how* are they learning? The curricular spider web developed as SLO is a widely used tool to decide about the learning environment elements, like grouping, location, resources, teacher role and so on. (SLO Netherlands Institute for Curriculum Development, 2018).

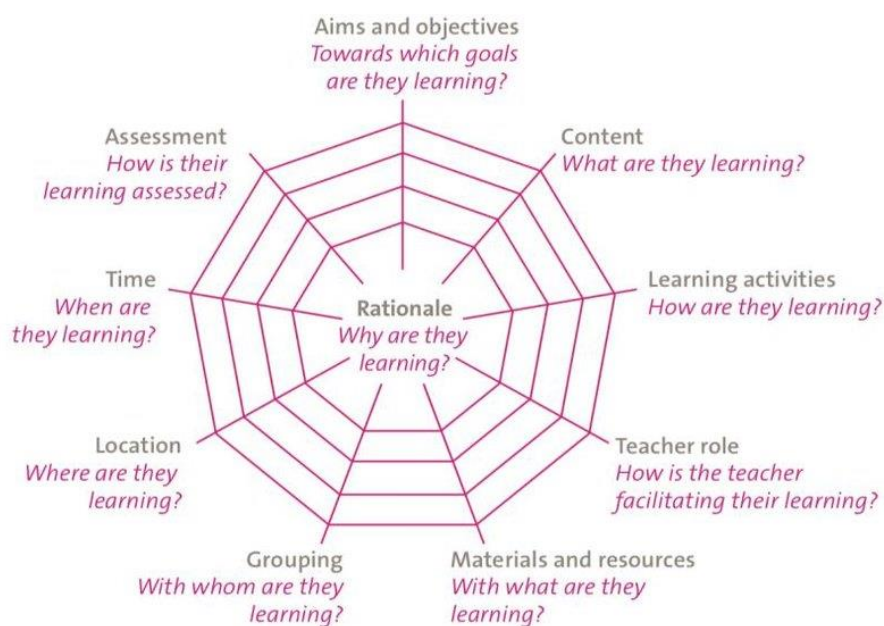


Figure 4: Curricular Spider Web (SLO 2018)

Now that the educational setting elaborated, another look into citizenship education, XR in the international context is in place.

## International citizenship education and extended reality (XR)

Ahrari et al, use this model of citizenship education and curriculum (S. Ahrari, 2017).

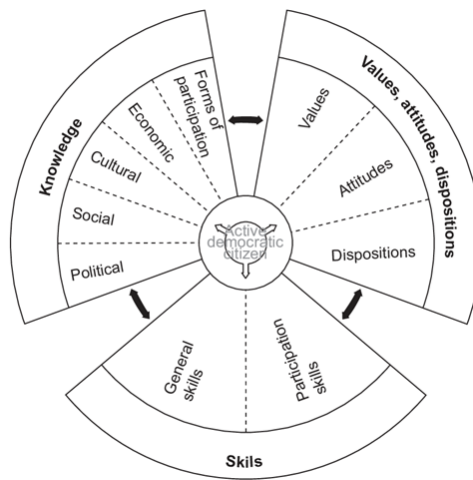


Figure 5: Categories of democratic citizenship education curriculum (Ahrari, 2017)

One can distinguish direct links with knowledge, skills and attitude at different levels and the competence models and authentic learning models mentioned before. All these citizenship competences are applicable to the professional atmosphere. Not only students in public management need to be educated or self-educated, although it is obvious in their curriculum. Also a technician or an architect must be aware of the ethical implications of professional activities and decisions and be able to act on them.

Professionals need to work meaning-oriented, which should be addressed in every curriculum. Of course one cannot do this in every assignment or module, therefore the overview like in Zelcom is useful in curriculum development.

When returning to extended reality in the curriculum, the following benefits of XR are mentioned by (Gils, 2020), (Häfner, 2020) (Papagiannis, 2020) and others:

- It ensures a variation in learning.
- Personalization is possible. Experiencing it yourself, making your own avatar, designing your own situations.
- It is more compelling, exciting than most forms of learning.
- Engaging, and leads to active learning
- Cooperation is key (possibly, depending on others) and engaging with others.
- Technical skills go hand in hand with knowledge (and preferably awareness).
- It offers the possibility to interact with data in a different way.

Except from scientific research proof comes from companies who share their experiences with XR and express how it affects their work, saves time and brings motivation. (ASML, Valmet websites). The labor market is of course the driving force behind the need for XR professionals and professionals with experience with XR. Companies also highlight that XR experiences also make learners realize it also influences their environment, not only vice versa.



There is a lot of experience with XR worldwide in companies and not-for-profit-organizations and in educational institutions, but in concrete terms, outside technology and healthcare home automation, little research seems to have been done into the effects in education, let alone in the international context.

Of course there are limitations to extended reality. Time and costs, -including expensive labs- , although depending on the form of XR. Technical issues are relevant, like the availability of a strong internet connection.

In education the following disadvantages or and risks one needs to be taken into account: (Dede, 2009) and (Häfner, 2020).

- Risk of limited acceptance of the technique or tool or way to use it (students feel discomfort for various reasons).
- Not always contributing to learning outcome because of overload of information and experiences.
- Safety issues and security issues of the data or of the student (for instance: harassment by anonymous avatars).
- Communication issues (distraction because of wearing glasses; cultural issues).

It is important to also look at the environment, of teacher, of institute and beyond.

Dede and Dunleavy also note the need for attention on teacher's competences: '...it is the teaching that explains most of the difference in student learning gains on studies that compare technology-based versus control curriculum, rather than the media by which instruction is delivered' (Dede, 2009).

When looking at authentic online learning environments, the model of Parker is quite informative, it combines relevant elements from some of the previously mentioned models. It looks at learner's needs from three perspectives: authentic learning environment, meaningful learning with technology and open educational resources (Parker, 2016).

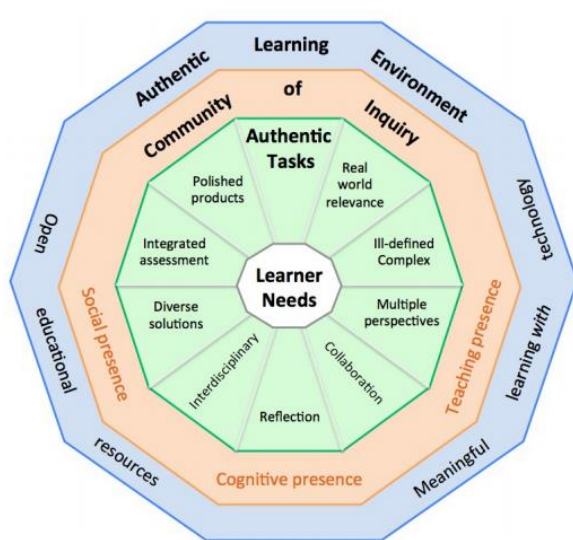


Figure 6: Learner needs in online learning (Parker 2016)

Towards the link between citizenship and XR a few additional viewpoints are shared here.

Online learning requires knowledge, skills and awareness of the consequences, possibilities, threats. Like the council of Europe shows in her Digital Citizen Education Handbook (Council of Europe, 2019) with 3 dimensions:

- Being online: Access and inclusion; learning and creativity; media and information literacy.
- Well-being online: ethics and empathy; health and well-being; e-presence and communication
- Rights online: active participation; rights and responsibilities, privacy and responsibilities; consumer awareness

Fonseca et al researched informal interactions in 3D education in 'Citizenship participation and assessment of virtual urban proposals work'. The main result sees new technologies in education not as tools or delivery systems, but a set of resources and affordances that provide an opportunity to rethinking our educational aims, methods and institutions (David Fonseca, 2016).

Burbules states the following important finding about the use of IT and media: "The failure to engage this opportunity for rethinking is a constraint on the truly transformative potential these technologies possess. At the same time, this rethinking has to have a critical dimension: not only what these technologies do for us, but what they do to us " (Burbules N. , 2016).

Haupt concludes that IT are a fixed feature in current citizenship education. The author discusses some aspects with regard to citizenship education and new media in formal education. Digital media, for example, offer a variety of possibilities of enhancing interactivity and of voicing one's opinion. Additionally, citizenship education can make use of these tools by allowing for a testing and trying out of political action within the small scale. Still, digital media in citizenship education also bear some challenges that educators should take into account. For instance the expectation that all students (and teaching staff) are competent in using digital media, may lead to exclusions for groups of people that don't have access to or (yet) have the competencies of using these new tools. One major function of citizenship education therefore is to aim for the inclusion of all groups of people and to make use of all options to reach learners by the means of new media. (Haupt, 2017)

Investigation from a journalist perspective was done by Georgieva et al, who advise to definitely include ethical issues in the learning process and include learning new media (Georgieva, 2018).

Saxion UAS works with its XR Lab and also started experiments at the intersection of XR and citizenship because more experiences and research are needed, also for teachers. Sanchez states in his proposal for the use of XR in international competences acquirement: "Innovation gives new opportunities for education. The intended benefit for students is an enhanced interaction about and retention of specific international competences that go beyond the current use of digital platforms. With AR / VR, skills can be trained in real-life

situations outside one's own physical location, in so-called Authentic Digital International Learning Environments” (Sanchez, 2021). Pilots will have to prove that:

- AR / VR will be meaningful for international distance learning, especially in stimulating students to complete their courses by strengthening retention of learning experiences and competences. A benefit that should not be underestimated for the student is the authentic (international) authentic learning experiences that stimulate the critical view of global issues (i.e. promotion of global citizenship). Innovation is the focus on the explicit connection with the responsibilities of the future international professional and the international competences in their profession.
- Relevant starting point is, how teachers can better embed authentic international learning environments in the curriculum. Students participate in the development of the AR / VR environment and indicate themselves which competencies they aspire to as professionals in a globalizing context.

The general conclusion of various studies is that AR / VR applications can improve the learning process, learning motivation and effectiveness. Researchers indicate that further study is needed to understand how this medium can best be used for new types of learning experiences.

Little research has been done within higher education into the added value of these emerging technologies for internationalization, international competences and the impact on graduation. Many initiatives are currently still in the embryonic or pilot phase and are nationally / regionally oriented.

### **COVID-19 pandemic**

The COVID-19 pandemic shows us that in the new education (during or post COVID-19) attention must be paid to building up international and interdisciplinary competences, also at a distance, for at least two reasons. Firstly, because traveling and meeting each other in person is not always physically possible and the society still needs these competences. Secondly, because the current information bias threatens understanding between different groups in society and leads to possible misunderstanding and polarization, which are seen as a major risk for social stability. This applies to most societies around the globe, including the author's home country The Netherlands.

The pandemic made traveling less possible, sustainable development goals make that traveling is looked at critically for climate protection (United Nations, 2015).

The Dutch organization for international education (NUFFIC) foresees a change in economic gravity and perhaps an economic crisis worldwide and how these developments are changing European education. The education strategies of countries and regions must be geared to this (Nuffic, 2020).

- Digitalization of society is accelerating.
- Flexibilization of education was given a boost.

- More opportunities to collaborate and integrate technology into curricula through distance learning.
- Self-reliance is key.
- A greater focus on cooperation within the region and within Europe.
- Safety, security and uncertainty need to be addressed.

Although not post-COVID, the COIL concept gets rapid attention in international education in the past year. Coil stands for Collaborative Online International Learning:

Collaborative: Student to student learning by working together, to improve the team skills. Online Learning how to work in a remote team and manage virtual tools in a professional manner. International: Cross cultural learning by bringing the world into the classroom, offering all students an international experience in cultural, language and time management, cooperation skills and leadership skills. Learning: Practicing professional skills and learning from peers around the world (Coventry University, 2021)

Coventry University in the UK is an COIL expert, with projects with many European universities. Together with Saxion UAS a COIL Finance Lab and a COIL Security Lab are executed, with reflective portfolios as part of the professional products that are assessed.

It could have been mentioned earlier in this article, as COIL is a tool to design authentic learning environments without traveling. It is E-learning, but could be much more, with or without XR. The collaborative part is key here: real time or asynchronous, digital, and with insight. COIL could be a vehicle to give students the possibility of an international experience. More students can now gain the necessary international experience remotely, without traveling, as a replacement for or in preparation for physical international experience. COIL could be a tool to design authentic learning environments without traveling.

Yet, digital education is not equally accessible to everyone. Digitization is taking place at different speeds within society and society needs to be careful that everyone comes along (Garcia Estrada, 2021). Yet, online learning and XR cannot replace the real experience totally and everywhere. Whether it could, and when and how real meetings and real experiences are necessary needs to be researched. Sometimes a real experiences supports better learning later, sometimes online collaboration is a perfect start of the learning journey.

During the pandemic learners and educators got other experiences and notions, that need a follow up. Possibilities and learning needs are to be taken into account by educators and managing and policy staff at universities and beyond.

### **Albanian higher education and society**

Higher education in Albania is expanding, but how can it cater for the needs of the changing society and its young people? A few researches on the quality of higher education, the labor market development and the experiences with international citizenship education are mentioned below.

Intensified cooperation with EU and EU countries would certainly lead to expansion of economic sectors in Albania, especially in the main urban areas. Preparing the labor market for the future is important to deliver challenges to young professionals in Albania. In IT, agribusiness, tourism and other sectors. Whether or not one believes in Richard Florida's Rise of the Creative Class (Florida, 2002), it seems obvious that Albania needs creative professionals in the broad sense. These professionals are needed to link innovations to the various professional uses, and they are needed not only to design, but also to apply.

According to OECD, Albania has improved access to education and raised learning outcomes since the 2000s. The organization states that educational attainment and performance still are strongly influenced by students' background characteristics. This reflects systemic challenges of low funding, unstable governance and limited capacity. Placing student learning at the centre of Albania's evaluation and assessment processes can help to focus the system onto raising standards for all (OECD, 2020).

The European Commission investigated the impact of migration on higher education and the Albanian society. Albania has one of the highest rates of emigration in recent decades in the world, part of which includes a substantial scientific diaspora. The Albanian scientific diaspora is relatively young, mainly located in OECD countries yet highly mobile between them, diverse in terms of field of study, and mainly employed in universities and research institutes. Members of the diaspora maintain close links to Albania, yet only a small minority realistically foresee return, due to a combination of economic and political obstacles (GVG for European Commission, 2012).

Positive features in this respect are, compared to other countries, the increasing number of university students, the growth of the number of universities, the relatively freedom of curriculum design and the high percentage of female students.

Laze investigated social dimensions of universities in Albania. She defines the role of Albanian universities as threefold: Firstly, assist development of society; here is the link to citizenship; secondly, support economic development; here is the link to professional competences. Thirdly, fulfill aspiration of young people; here is the link to personal development. Universities should work on their teaching methods, content of teaching and management, is her advice (Laze, 2013).

This also reflects the results of the research 'Mentoring and teachers' professional development in Albania' by (Gardinier, 2018). Mentoring, reflecting and communicating helps, but also requires teachers to be up to date in technology.

The VALEU-X project of a number of EU and Albanian universities executed a needs assessment on virtual collective teaching and learning in Albania, delivered important conclusions and advices on how to proceed with collective online teaching (VALEU-X Project, 2020). Although part of the interviewed staff felt confident to work online even collaboratively. The advices include a need for more international exchange, for more capacity building of educators on skills and mindset. This in order to have XR as part of formal curricula and to enhance IT literacy of educators.

## Concluding remarks

This article discussed the scientific insights and societal developments around international citizenship competences in curricula at universities and how collaborative learning and extended reality can play a role in this.

First, the author likes to share the statement of Burbules: 'Education is a catalyst on the well-being of individuals and our joint future. If we are to end unsustainable thinking and practice, we will need a transformed system of education to guide us into a prosperous and sustainable future. Here we argue for a different orientation toward thinking about new technologies in education. Not just as tools or delivery systems but as a set of resources and affordances that provide an opportunity to rethink our educational aims, methods and institutions. What do these technologies for us and to us?' (Burbules N. , 2016)

Since COVID-19, citizenship education has gained additional relevance, because of the importance of being able to deal with digitization and technology, both in terms of technology and in terms of knowing what it can do for a learner and what it does to the learner and to society; to the personal responsibility as a professional, to media literacy and to civic involvement. This goes for Albania as well as for other European countries, like The Netherlands.

Distance learning is already possible and common to some extent, but collaborative online learning and use of extended reality is advised, in order to cater for the international citizenship competences. Experiencing and learning citizenship skills while working on personal professional development is key.

Pilots and experiments in various professional fields are needed to see what works and what doesn't. These are needed for, but especially, with students. With the support of enthusiastic educators, because they are the 'conductor'. With COIL as the basis and experiments with students; with active learning and reflection as an integral part of their learning process, in order to keep cohesion in society -not societies- and to be aware of equal opportunities.

There is an urge to work on continuous development of existing curricula and work on new curricula, for instance on XR design. The design technological curricula is relevant for the professional field, but especially the crossroads of technics and creativity are most promising. This also reflects the need of the Albanian society to trigger and keep creative young professionals. This fits in human capital agendas.

Depending on the specific study program, it could be more or less focused towards technology and more or less focused towards active citizenship roles. But it should all contain reflection on professional roles in the setting, with an eye for alternatives and consequences. All should be able to use and reflect on the media, on how it is used in their scope and beyond.

Albanian universities are part of Erasmus cooperation programs and other international projects. One would hit two birds with one strike, if these elements were in international projects. Since one may not have the opportunity to do everything separately and it works

best integrated. At Saxion UAS the intention is to use e.g. the Erasmus-project on Resilient Democracy and European Identity for this exchange of experiences. For the benefit of the learning process of Albanian and Dutch students, the curricula at both sides and society.

On last word about the teachers, the educators. When using authentic learning environments, the ethical implications of actions or thoughts become more apparent. With a professional focus, students are likely to be interested and focused. But it is necessary to address these specifically when adopting XR in whatever forms. With XR there is possibility for more inclusiveness, but requires well trained professionals to support the learning process. If not, it might be just another 'drill', or one makes it too complicated; high tech is fine, but this is all about meaningful application.

Hopefully educators are critical, but mainly enthusiastic about all these new possibilities for students, institutions, society and themselves as educators. That they are able and willing to immerse themselves in new international experiences with their students.

## References

- Ahrari, S. J. (2017). *Using Network-Based Theory to Develop a curriculum for Citizenship Education in Higher Institutions*. Retrieved from Research Gate.
- Bloom, B. (1956). of Bloom's Taxonomy of Educational Objectives.
- Bulthuis, P. (2013). Het Zelcommodel, grip op competentieniveaus. *Examens*.
- Burbules, N. (2016). How do we use and are used by social media in Education.
- Burbules, N. G. (2020). Five trends of education and technology in a sustainable future. *Geography and Sustainability*.
- Council of Europe. (2019). *Digital Citizen Education Handbook*.
- Coventry University. (2021). *COIL*. Retrieved from coventry.ac.uk
- Curtiss, P. R., & Warren, P. W. (1973). The dynamics of life skills coaching.
- David Fonseca, F. V. (2016). Informal interactions in 3D education: Citizenship participation and assessment of virtual urban proposals. *Computers in Human Behavior*.
- Dede, M. D. (2009). Affordances and Limitations of Immersive Participatory Augmented Reality Simulations for Teaching and Learning. *Journal of Science Education and Technology*.
- Donk, S. v. (2013). Onderzoek naar Honours programma's Saxion.
- EAIE. (2020). Internationalization in Europe.
- Florida, R. (2002). *The Rise of the Creative Class*.
- Garcia Estrada, J. P.-F. (2021). Running an XR lab in the context of COVID-19 pandemic: Lessons learned from a Norwegian university.
- Gardinier, R. G. (2018). Mentoring and teachers' professional development in Albania.
- Georgieva, E. C. (2018). VR and AR: Ethical challenges ahead.
- Gils, F. v. (2020). *Potential Applications of Digital Storytelling in Education*.

- GVG for European Commission. (2012). *Social Impact of Emigration and Rural-Urban Migration in Central and Eastern Europe*.
- Häfner, P. (2020). *Categorisation of the Benefits and Limitations of Immersive Technologies for Education*.
- Haupt, M. (2017). Citizenship Education and New Media: Opportunities and Challenges.
- Keating, H. O. (2009). Citizenship education curricula: the changes and challenges presented by global and European integration.
- King, I. G. (2019). *The Albanian scientific diaspora: can the brain drain be reversed?* Retrieved from tandfonline.com
- Kolb, A. Y. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education.
- Kratwohl, D. (2002). *The taxonomy of educational objectives*.
- Laze, J. (2013). The Social Dimension of Higher Education In Albania.
- Miller, G. (1990). The assessment of clinical skills/competence/performance. *Academic Medicine*.
- Mourtzis, D. F. (2019). An Adaptive Framework for Augmented Reality Instructions Considering Workforce Skill.
- National Education Association. (2012). An educator's guide to the Four C's: preparing 21st century students for a global society. .
- Nuffic . (n.d.).
- Nuffic. (2020). Grip op onzekerheid; toekomstscenarios voor tijdens en na de coronapandemie.
- OECD. (2020). *OECD Reviews of Evaluation and Assessment in Education: Albania*.
- OECD. (n.d.). <https://www.oecd.org/education/Global-competencyforan-inclusive-world.pdf><https://www.oecd.org/education/Global-competency-foran-inclusive-world.pdf>.
- Papagiannis, H. (2020, April). *Weforum*. Retrieved from World Economic Forum: [www.weforum.org/agenda/2020/04/augmented-reality-covid-19-positive-use/](http://www.weforum.org/agenda/2020/04/augmented-reality-covid-19-positive-use/)
- Parker, J. (2016). *An authentic online community of learning framework for higher education: Development process*.
- Revington, S. (2018). The Remarkable, Impactful Journey of Authentic Learning. *The Canadian Teacher*.
- Sanchez, W. (2021). Succesvol online afstuderen, internationale competenties opbouwen met virtual reality in het nieuw normaal onderwijs.
- Saxion UAS. (2021). *saxion.edu*.
- Slingerland, W. (2016). *Beroepsethiek in het onderwijs: van bijzaak naar bildung*.
- Slingerland, W. (2020). *Week of Integrity Albania; Citizenship education*.
- SLO Netherlands Institute for Curriculum Development. (2018). *The spider web: framework for assessing student participation*.
- Teneqexhi, R. L. (2015). Virtual and real face to face teaching.
- United Nations. (2015). *Sustainable Development Goals*. Retrieved from <https://sdgs.un.org/goals>
- VALEU-X Project. (2020). A needs assessment report on Virtual collaborative Teaching and Learning in Albania.
- Wehlage, F. N. (1993). Five standards of authentic instruction. *Educational Leadership*.



## English summary

Higher education supports students in acquiring competences, a mix of knowledge, skills and attitudes. Experience has shown that it is precisely attitude and skills that ensure a better connection to the labor market, in whatever sector in whatever country.

The article examines the developments and experiences in authentic learning environments in relation to international aspects of citizenship education. It discusses the possibilities and limitations of the use of extended reality in general and in this context. The focus is on the curriculum and class-room level in higher education, so on knowledge exchange at practitioners level, with an eye for the policy implications at other levels.

The author links this to the educational and societal developments in Albania and her home country The Netherlands, during and after COVID-19, and shares her thoughts on the needs for continuing attention on new forms of citizenship education. Because the pandemic makes it necessary to re-consider past self-evident interpersonal relations and international experiences.

In professional oriented education authentic learning environments are important, because it makes learners easier to assimilate, obtain problem solving skills and they are more motivated to learn. Depending on their personal learning styles, they obtain competences.

Citizenship competences are necessary, regardless of the specific professional domain of the learner, but the content and form should be adapted to the situation. International experiences are part of this competences. It is exactly in this field that large developments took place, because of COVID-19 and independently thereof.

In a society where travelling is not possible because of physical or financial restrictions or not wanted because of sustainability considerations, collaborate online learning offers chances. Especially education with extended reality may serve as preparing or replacing for real-live international experiences. There are certainly limitations and requirements, but the advantages are numerous, e.g. the personalization possibilities, it is engaging, the adaptation of technical skills and the need to cooperate.

Since COVID-19, citizenship education has gained additional relevance, because of the importance of being able to deal with digitization and technology, both in terms of technology and in terms of knowing what it can do for a learner and what it does to the learner and to society; to the personal responsibility as a professional, to media literacy and to civic involvement. This goes for Albania as well as for other European countries, like The Netherlands.

Pilots and experiments in various professional fields are needed to see what works and what doesn't, with collaborative online international learning as the basis. Reflection should be an integral part of the learning process, in order to keep cohesion in society -not societies- and to be aware of equal opportunities.

There is an urge to work on continuous development of existing curricula and work on new curricula, for instance on XR design. The design technological curricula is relevant for the professional field, but especially the crossroads of technics and creativity are most promising. This also reflects the need of the Albanian society to trigger and keep creative young professionals. Albanian universities are part of Erasmus cooperation programs and other international projects. One would hit two birds with one strike, if these elements were in international projects. This is equally important in The Netherlands.

By combining citizenship education and XR there is possibility for more inclusiveness, but requires well trained professionals to support the learning process. If not, it might be just another 'drill', or one makes it too complicated, since this is all about meaningful application. Hopefully educators in Albania and abroad are critical, but enthusiastic about all these new possibilities for students, institutions, society and themselves as educators. That they are able and willing to immerse themselves in new international experiences with their students.