Developing Universal Design In Teaching and Learning: Using a freely available eBook

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Abstract

This paper discusses how you can use a freely available eBook to develop universal design in your teaching. This book is Padden, Lisa. O’Connor, John and Barrett, Terry (editors) (2017). Universal Design for Curriculum Design: Case Studies from University College Dublin. Dublin: UCD Access and Lifelong Learning. The full book or individual chapters can be downloaded freely at

https://www.ucd.ie/all/supports/informationforstaff/stafftraininganduniversaldesign/

Keywords

Universal Design, Teaching, Learning

1. What is Universal Design for Teaching and Learning?

Universal Design is a principle-based approach to designing teaching and learning in higher education to meet the learning needs of all students. Universal Design is the creation of a product/service/environment which can be accessed, understood and used to the greatest possible extent possible by all people, regardless of their age, size ability or disability. Higher Education has become increasingly diverse, with a particularly rapid change in the last ten years. As we now strive to achieve widening participation of those students traditionally under-represented in Higher Education and open our campuses to increasing numbers of international students, we must ensure that our teaching and learning develops in line with the student population. Universal Design (UD) offers us a framework which helps us to consider and embrace our diverse classrooms. While we may not all be experts in particular disability types using the UD framework gives you the tools you need to take all learners into consideration when planning and designing your curriculum. Universal Design principles work for the majority of students. It is the baseline, the first level on the pyramid of inclusion in higher education. The universal does not preclude but includes additional layers of support and inclusion. The second layer is provisions for students with similar needs, e.g. more time in exams. The third layer is individualised accommodation, e.g. the use
of specialised technologies. The fourth and final layer is the provision of personal assistants.

Figure 1 The Universal Design Pyramid: Multiple Layers of Inclusion in HEIs
2. What do students say they want from teaching in higher education?

“... the best stress reliever is having a good teacher who is easily approached I think.”

“We really need classes on how to approach group work and presentations.”

“It is helpful when the lecturer makes it “...exceptionally clear what is wanted from an assignment, group project etc.”

“We need more tests which are worth less percent of the final mark.”

“...a few lecturers I had that put lecture slides on blackboard before lectures. I found this very helpful as I went into the lecture with the slides and it helped me to take better notes.”

“At the start of the year we were and are all very stressed about writing essays and not knowing what standard is expected or especially how to reference correctly which stresses me out as I fear I will lose a significant amount of marks.”

We must always ensure that the student voice is central in the development of educational practises. The feedback above came from students linked with Access &
Lifelong Learning, University College Dubbin, who were asked simple open questions about their experiences in an anonymous online survey. We asked only: what helped and what was difficult?

### 3. Principles of Universal Design and Some Case Studies of these in action in the book

The following figure makes the links between the specific *Nine Principles of Universal Design for Instruction* a quotation from a student about something specific that helped or hindered their learning and a case study in the book that is a worked through example of the specific principle of universal design and addresses the issue highlighted by the student.

<table>
<thead>
<tr>
<th>Universal Design Principle for Instruction</th>
<th>Quotation from Student</th>
<th>Case Study in Book Principle in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equitable Use</td>
<td>“Having the slides before class means I can focus on what is being said and not panic about what I might miss”</td>
<td><em>Chapter 7 Knowledge to Navigate College</em> (online lectures and resources available anytime, college knowledge resources for navigating study skills and the system)</td>
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<tr>
<td>2. Flexibility in use</td>
<td>“The best modules are the ones where there isn’t just essays or exams - there is a mix and the work is spread out.”</td>
<td><em>Chapter 11 Debating: How to Advance our Students’ Communication Abilities</em> (flexible assessment using debating and reflective writing as part of the process)</td>
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<td>3. Simple and Intuitive</td>
<td>“I have a lecturer who laid everything out clearly”</td>
<td><em>Chapter 3: Navigating Semester One: A</em></td>
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<td><strong>4. Perceptible Information</strong></td>
<td>“When lectures use slides that are packed with information it is impossible to read that most of the time.”</td>
<td>The full book <em>Universal Design for Curriculum</em> (Design uses UD principles and is provided in accessible formats for all readers)</td>
</tr>
<tr>
<td><strong>5. Tolerance for Error</strong></td>
<td>“When the feedback isn’t specific it is hard to know what to do for the next assignment.”</td>
<td><em>Chapter 10: Facilitating Students to Showcase their Research with Pride: Embedding the Presentation of Student Research into a Part-time Business Degree</em> (Learning and getting feedback on Study Skills, Academic Writing and Research Skills are embedded in the module)</td>
</tr>
<tr>
<td><strong>6. Low Physical Effort</strong></td>
<td>“Lecturers rushing through slides that aren’t on Blackboard [VLE] and students panicking because they can’t write”</td>
<td><em>Chapter 2: Integrating Support for Part-time Students.</em> (Students on this programme are provided with a very accessible</td>
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</table>
| 7. Size and Space for Appropriate Use     | “I love the classes where we do some exercises and it isn’t all crammed into a lecture theatre trying to listen for 50 minutes.” | *Chapter 3: Navigating Semester One: A Roadmap for First Year Undergraduate Student.*  
(This initiative includes a How is it Going Coffee Morning in a relaxing lounge) |
| 8. A Community of Learners                | “In my favourite classes the lecturer gets everyone involved and there is no feeling of us and them.” | *Chapter 8: Maths Sparks: Learning Maths, Teaching Maths and Widening Participation.*  
(Community of learners created with second-level students, third-level students and teaching staff) |
| 9. Instructional Climate                  | “...a lecturer sent an email to all students in our module and said if there is anything we |

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needed extra help with
to just let him know..”
(This includes providing
a sample inclusivity
statement for a module)

Figure 2: Universal Design Principles for Instruction: Student Voice and
Detailed Case Studies

4. Why this book on Universal Design?

All staff in higher education who teach or support student learning want the teaching
and learning approaches to be designed to meet the learning needs of all students. The
introduction to this book gives an overview of Universal Design principles together
with simple things we can all do for Universal Design in our teaching. There are three
main sections in the book.
If you are particularly interested in one of these aspects of teaching and learning you may wish to go straight to that section.

Traditionally those designing programmes and modules may have thought about the ‘typical student’ when completing this process. However, this approach must be abandoned when we consider the makeup of the modern Higher Education campus including: international students, students with disabilities, students from socio-economically disadvantaged backgrounds, mature students, part-time students and school leavers. While many may think that the typical student in Ireland is an 18 year coming to Higher Education directly from their Leaving Certificate Examinations (and thus trained to succeed in text-based education), this is increasingly not the case. We cannot make assumptions about the educational backgrounds of our students as teaching to only an imagined typical students creates barriers for all students in your classroom. Even those students who may seem to fit this profile of a typical student have a variety of learning preferences which are ignored when we offer only one type of educational experience.

At the core of Universal Design is a focus on variety and choice for students, a movement away from the traditional didactic, often solely text-based, classroom practises of the last century and the embracing of a more dynamic and evolving classroom.