

Emerging Trends in Instructional Design and Technology

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by

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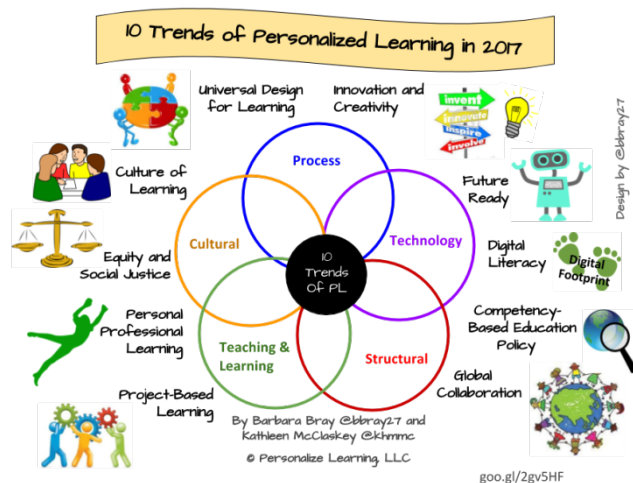
University of the West Indies, Open Campus

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## Focusing on Small Data

### Focusing on Small Data: Personalizing Instructional Design

There have been several attempts to individualize learning. Theories about different types of learners have come to the fore, especially during the latter part of the 20<sup>th</sup> century through the 21<sup>st</sup> century. It is then not a surprise that personalized learning in itself has brought forward many emerging sub-trends in 2017. “We see the trends as a way to focus more on the distinctive characteristics of each learner and adapt the system and process as they learn, grow, and change” (Personalize Learning, 2017). Sometimes, however, the focus is on whole communities and not just on individuals. Each community, after all, carries a distinct personality. There are some educational experts that are not very optimistic about personalized learning’s role in the 21<sup>st</sup> century. Nevertheless, education thought leaders have realized that “to truly make a difference in student learning and achievement, we must pay attention to “small data,” too” (Levine, 2017).



## What is Small Data?

Small data refers to the minute details that affect the individual: behavior, social interaction, learning styles, and more. These are the types of data that social media effortlessly incorporate into their database, thus enabling these websites to feature and offer the user what

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they are interested in. For example, a Facebook user will glimpse banner images of the products that he has previously browsed at Amazon or another online shopping website. This ad certainly catches his attention, because it showcases something that he has already pursued in some way. The banner becomes a prompt or reminder that aims to encourage sales. In education, a similar strategy may be applied to encourage learning. For younger learners especially, reminders or prompts are vital to long-term absorption.

In education, incorporating small data in the form of observations can be very demanding and time-consuming without a system in place. Different aspects of personalized learning, such as technology, structure, teaching, and culture, would all be taken in consideration. Sweet Rush Instructional Design manager Clare Dygert said that “It [Facebook] knows what I like, who I am, what I’ve done, and what I’d be interested in. Then I come to work and take an eLearning course that’s nothing like Facebook, on a system that doesn’t know who I am, doesn’t understand what I want to know about, and doesn’t have any information about me. (Coffey, 2017)” Instructional designers agree that it is time to put the spotlight on the learners. What may work on one learner may fail on another.

### **Use of Technology**

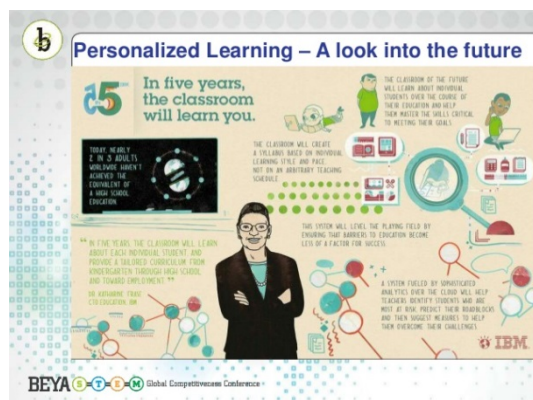
What makes it easy for small data to come into focus in this century is the use of technology. It is not as attainable as it appears, though. “Technology has made personalized learning both more approachable and more challenging, forcing schools to draw a clear line about where to separate good pedagogy from tools that facilitate it” (Garcia Mathewson, 2017). Personalization certainly permits students to be listened to and to be valued better. However,

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there are currently numerous existing computer applications that the solution may become muddled, instead of making data clear.

Each school has the option to create its own personalization application. If it has an in-house technology team, then the team could develop such an application. The application can produce personalized lesson plans and schedules for each learner. While this may not sound like a very novel idea, customized technology can deliver a more accurate and intensified personalization.

Why are we saying that personalized lesson plans are not part of a convincingly novel idea? The idea had its beginnings in special education, about forty years ago. It was during that period that teachers recognized “that a one-size-fits-all approach is not the most effective way to teach the kids in their classroom” (Weller, 2016). A bill called EHA (Education for all Handicapped Children) was even passed in 1975 to ensure that children with learning challenges would be offered the same opportunities. *Clearly, teachers already knew even then that there was a need to customize education for each child.* It was not merely a hipster, technologically-motivated vision. Moreover, with the aid of administration, teachers, parents, and other school personnel, “some schools formalize personalized learning by creating individual plans for every student” (Garcia Mathewson, 2017). This, however, can be energized by combining it with personalized learning platforms of customized learning management systems (LMS), which have been designed for the specific school alone. Summit Public Schools, interestingly enough, created its platform in partnership with Facebook.



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Personalization in the classroom had been desired and even existing for several decades. However, it was in 2005 that Dan Buckley clearly defined it for everyone else. Buckley also came up with Secret, which means S – Self-Managers, E – Effective Participators, C- Creative Thinkers, R – Reflective Learners, Independent E- Enquirers, and T – Team Workers (Buckley, 2010).

### **Examples of Potential Use**

1. Special education
2. Creative learning
3. Self-paced learning
4. Keeping students in school
5. Digital learning/literacy
6. PBL

Personalization may be a time-consuming exercise, but it is a better option compared to aimlessly bombarding students with information that they are not interested in. Social media is capturing the attention of young people, even of some prodigious primary school children. It is more addictive than a textbook or a learning platform. Why can't the learning platform adjust to encourage the learner to engage completely by using prompts that interest him or her?

### **Reflection on the Research**

Not having an education background, I am not aware of the existing pedagogies before I enrolled into UWI Open Campus. Teaching as an animation instructor made me believe that having the skills is more than enough. As a second grade teacher, I found myself flailing for something to anchor me. Young children need more guidance. They are just beginning to know themselves.

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They are not animation students who already know that they want to work in visual arts one day.

The research process was then difficult and rewarding at the same time. It was difficult because I found myself floundering. Am I looking for the right thing? Is personalization even a trend? The term is too common, and is even reflective of the Me-Decade, the 80s, in which I found myself absorbing and learning for the first time as a young child. On the other hand, it was rewarding. I did not know that teaching is this complex. Education, I realize, need strategy to work well. The people who said that “Those who can’t, teach” have no idea what they are saying.

## Self-Assessment

Requirement	Score (Out of 5)	Weight	Points	Maximum Points allowed	Comments
<b>1. Research paper</b>					
Identification of emerging trend/issue	4	0.4	1.6	2.0	
Relevance to the field	4	0.7	2.8	3.5	
Evidence of artefacts (i.e. illustrations, pictures, references, etc...)	4	0.7	2.1	3.5	
Identification of initiator of emerging trend/issue	3	0.4	1.2	2.0	
Examples of [potential] use	4	0.8	3.2	4.0	
<b>3. Reflection</b>					
Reflection included references to the research experience	4	0.4	1.6	2.0	
<b>3.Quality of Assignment</b>					
Effectiveness and Craftsmanship(File named appropriately, Interview formatted as example, Spelling and Grammar, Document presentation quality)	4	0.60	2.4	3.0	
<b>FINAL SCORE</b>			14.9	20.00	

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