



## Acknowledgments

This Global Business Coalition for Education (GBC-Education) discussion paper, Launching a Global Education Platform: Lessons and Recommendations from the India Pilot, was prepared by David Hollow and Joel Mitchell (Jigsaw Consult). GBC-Education would like to thank Global Education Platform (GEP) Director Adam Braun and GEP Consultant Julia Firestone for their leadership, execution of the GEP pilot, and insights which resulted in delivering this phase of the initiative and this report. GBC-Education would also like to thank Kolleen Bouchane, Dan Boyer, Lauren Lichtman, Madeline Serena and Justin van Fleet for their collective feedback and insights that have shaped this report as well as Jonathan Leung for the design of this report.

A special thanks to GEP pilot partners: Wattpad, Twitter India, HP, STiR Education, and Teach for India. Thank you as well to the many individuals, companies, and organizations that have contributed to the launch and successful pilot of the GEP. GBC-Education thanks Rebecca Winthrop (Center for Universal Education at the Brookings Institution) and participants of GBC-Education's #Tech4Ed meeting held during UNGA week 2015 for their continued support and insights.

© Global Business Coalition for Education, 2015-2016

## Acronyms used in this report

DFID	Department for International Development
EFA	Education For All
EiE	Education in Emergencies
GBC-Education	Global Business Coalition for Education
GEP	Global Education Platform
HP	Hewlett Packard
ICT	Information Communication Technology
ICT4EiE	ICT for Education in Emergencies
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MNO	Mobile Network Operator
MOOC	Massive Open Online Course
NGO	Non-governmental organization
UGBU	User-generated bottom-up
UNGA	United Nations General Assembly

# **Table of Contents**

	Executive Summary	2
1.	Context	4
1.1.	Purpose of the report	
1.2.	Structure	
2.	The Global Skills Crisis	5
2.1.	The ongoing skills crisis	
2.2.	Use of technology	
3.	Explanation of the Global Education Platform	7
4.	Review of the Pilot Project	9
4.1.	Approach of the YourStoryIndia pilot	
4.2.	Partner selection	
4.3.	How the YourStoryIndia pilot addresses goals	
4.4.	Early findings	
5.	Summary and Recommendations	15
5.1.	The great need for technology solutions	
6.	Annexes	18
6.1.	Bibliography	
6.2.	Exemplifications	
6.3.	Interviews conducted during research	
6.4.	Projects reviewed during research	
6.5.	Promoting good practice in the sector	
6.6.	Education in emergencies ten priorities	
6.7.	GEP model 4	

6.8. GEP's potential role in standards and certification

# **Executive Summary**

This report documents the ongoing contribution of the Global Education Platform (GEP) initiative in addressing the global skills crisis. We hope this report will serve as a key contribution detailing the work of the GEP, highlighting best practices, exploring ways to keep our attention and creativity focused on the challenge of addressing the skills crisis and equipping youth today to reach their maximum potential to contribute tomorrow.

Globalization, urbanization and rapid innovation in technology has created fundamental shifts in the workplace. The pace of this change is outstripping the growth of access to relevant skills, particularly amongst those entering the workforce over the next ten years. This is particularly true in poor countries or emerging economies, where although the '2025-generation' is increasingly gaining access to education, the skills they are learning are not necessarily the skills needed. As a result dire predictions of a global crisis of youth unemployment and its predicted impact abound. While technological innovation is part of the root of this gap in relevant skills, it is also concurrently a critical part of addressing it effectively. The use of technology to increase learning and bridge the skills gap is critical to creating a new global workforce as well as to ensuring that all youth have the ability to reach their true potential, find meaningful employment and not be at risk of exploitation for their basic survival.

The GEP emerged through a call to action from United Nations Special Envoy for Global Education Gordon Brown in late 2013 and has developed through the strategic leadership of the Global Business Coalition for Education (GBC-Education) and GEP Director Adam Braun. The GEP has worked to identify and understand significant technology-based education platforms and initiatives, and determine the potential of these efforts to contribute towards a truly global education platform that holds the potential to close the global skills gap preventing marginalized populations from employment. The opportunity to address this gap with an accessible, relevant and focused learning platform, geared towards employability, is the mission of the GEP.

With marginalized youth who may not have been afforded the opportunity to attend school or access resources and scalability in mind, an appropriate GEP model was developed in conversation with various stakeholders. In current form, the model is characterized by the following elements: user-generated content creation, device agnostic and mobile accessible, locally relevant content, decentralized, data-tracking capabilities, and shared leadership. The model is best encapsulated as a global education 'user-generated bottom-up platform' (UGBU) model. These characteristics begin to address the critical skills gap in a way that is pedagogically relevant and effective, as well as scalable and reproducible.

Through our pilot project — YourStoryIndia — we began to test the assumptions and values within the model, apply them in practice, and share that learning for the benefit of the wider sector. The intention of the pilot was to explore whether a platform, through promoting literacy, could make a systemic and scalable contribution to addressing the skills crisis. The YourStoryIndia Pilot was undertaken in partnership with a range of organizations, including Wattpad and Twitter India. A total of 1.4 million users have signed up and over 230,000 stories have been uploaded to the Wattpad platform in India since October 1, 2015.

The experiences of the GEP thus far have provided insight within the education technology sector regarding the importance of cross-sector and multi-stakeholder collaboration, user-generated content, and mobile phones as a tool for literacy. Each of these has played an important role in the development the platform model and is explored in more depth in this report.

Following the learnings of the YourStoryIndia pilot, there are various potential next steps for the Global Education Platform to continue to contribute to addressing the global skills crisis.

This report documents five potential opportunities to move the GEP forward:

1. Identify research priorities: Build upon learnings from the pilot, identify key opportunities for further development of technology-enhanced educational interventions serving the most marginalized populations globally, and leverage research to identify needs, existing tools, and effective solutions to global learning gaps.

**2. Build an advocacy network:** Develop in the role of a global 'champion' committed to promoting and advocating for good practice, building a network that can influence what happens across the sector as a whole.

**3. Develop an interactive hub:** Provide applied thought leadership to the sector to continue to address the skills gap, broker and incubate partnerships, facilitate spin-off initiatives, host high-level events, and connect like-minded organizations for maximum collaborative impact.

**4.** Launch additional pilots: Engage in a series of pilots focused on the use of education technology to address the skills crisis and track learning in a systemic and integrated way in order to contribute to the sector by building the evidence base for what works, what does not work, and why.

**5. Expand the platform:** Continue to develop the platform to draw in content from other providers, impose standards, structure, and multiple pathways applicable for different skills gaps and in particular work to tailor content and accessibility for different types of marginalization — including access in remote areas and use by people with disabilities.

Over the course of the YourStoryIndia pilot we became increasingly convinced that the mission of the GEP, to serve the needs of marginalized youth to close the global skills gap with an accessible, relevant and focused learning platform, is closely aligned with current needs of youth affected by conflict. From the experience of the pilot, the GEP believes that information communication technology for education in emergencies (ICT4EiE) is a context in which a global education platform could make a concrete and scalable positive impact and we believe that more research, more investment and greater focus on technology solutions in these contexts could have significant impact.

## 1. Context

#### 1.1. Structure

The report begins with a brief explanation of the global skills crisis and the place of technology in addressing this issue (chapter 2). It then provides a summary of the GEP, focusing on the model that the GEP has pursued (chapter 3). It reviews the YourStoryIndia pilot project that was conducted and reflects on the findings and learnings provided by this initiative (chapter 4). The report then provides a detailed call to action, exploring the future of the GEP, proposing a route forward, and emphasizing the importance of using technology effectively within EiE (chapter 5).

## 1.2. Assumptions

Acknowledging that the GEP is in its early stages, the YourStoryIndia pilot is meant to serve to explore the viability of the proposed user-generated bottom-up (UGBU) platform model and should not be interpreted as a comprehensive solution in and of itself. The pilot is just one type of intervention to support children who may be excluded from accessing materials in their native language and operates under the assumption that literacy helps facilitate access to the skills required by a 21st century workforce. Far greater research and data is needed in order to truly assess the potential of this model.

It should be acknowledged that an overarching principal of the GEP is to assist the most marginalized, including youth who have not been afforded the opportunity to attend school or who need additional support to achieve high-quality learning and ensure that activities are accessible to and useful for these marginalized groups. Additional solutions are needed to include those marginalized populations that may fall outside the scope of the YourStoryIndia pilot such as those with visual, learning and other disabilities.

The UGBU model also assumes that ownership is needed at the individual learning level in order to secure sustainable, long-term gains.

# 2. The Global Skills Crisis

GLOBAL BUSINESS COALITION FOR EDUCATION

Youth unemployment has already become endemic in parts of the Middle East and North Africa (MENA) and has been cited as a contributing factor to the political unrest of the region (Anderson 2011, Hoffman and Jamal 2012). To prevent a global crisis of youth unemployment, it is necessary to take urgent steps to bridge the critical skills gap between education and employment in the global economy and in part to put resources in the hands of marginalized children and youth.

## 2.1. The ongoing skills crisis

The emphasis on access to education on the global agenda has led to impressive gains in enrollment rates in many countries as tracked within the Millennium Development Goals (MDGs) and Education for All (EFA) initiative. The number of out of school children (5-11 years old) and adolescents (12-15 years old) is currently estimated at 124 million, with adolescents twice as likely to be out-of-school as children (UNESCO 2015). This is a significant reduction from 1999, when the total number stood at 204 million. Globally, 91% of children now enroll in primary school, a significant increase from 84% in 1999. Those who remain out of school are often the most marginalized and hardest to reach — girls from poor, rural households, children with disabilities or those children living in conflict-affected areas.

Despite the progress made, there are still major concerns regarding the quality of education provision once a child is enrolled, and the suitability of the education for equipping young people for the global workforce. There is an important distinction between basic literacy and functional literacy, the latter being what is required to effectively participate in the global economy. Educational institutions, teachers, and administrators often struggle to adapt to changes in technology which students are more ready to adopt. Similarly, the rapid pace of technology change can leave learners behind, especially the poor, and can lead to a recurrent gap between the skills taught and the skills required for employment. There is an inherent lag in acquiring skills critical to employment within the formal education system and this means that additional support is needed in order to address growing youth unemployment.

## 2.2. Use of technology

Technology is a primary vector of change in regard to the skills critical to employment. Use of information communication technologies (ICTs) in the workplace has become pervasive, resulting in fundamental shifts in the nature of work itself. Digital literacy is a prerequisite for participation in the global economy. Despite the fact that mobile technologies have now reached even the poorest communities around the world, the skills gap remains. Current uses of technology within education are often overly focused on skills not required for participation in the global economy.

The effective use of ICT in education continues to be contested for multiple reasons, including those related to political constraints, differing pedagogies, and varying approaches to implementation. Access to technology is certainly not ubiquitous —

many young people still lack access. However, a generation of young people, highly accustomed to using digital technology in their lives, also struggle to transfer their daily practices into newly developed employable skills. This represents a significant gap in both usage and learning practice. The opportunity to address this gap with an accessible, relevant, and focused learning platform, geared towards employability, is the mission of the GEP.

There are numerous ways in which technology is used in education: the provision of resources (hardware and software), connectivity, management, training, data tracking, and messaging and advocacy. However, there are many barriers that are often encountered when using technology in learning. When engaged with passively, there is significant potential for technology to increase the skills gap between those that have access to resources and those that do not. Most new technologies are made for those who already have some access, rather than being designed and deployed in a manner that proactively prioritizes the most marginalized. As a result, many initiatives over the last decade have not managed to live up to expectations. Fortunately, a more reflective use of technology for education is emerging, with increasing focus on rigor, learning, and contributing to the evidence base for the sector.

The situation outlined above means that across the education technology sector the importance of learning is now increasingly recognized. Two examples of this (in annex 6.2) are 'Generation,' a McKinsey Social Initiative, and 'Skills to Succeed' run by Accenture and Save the Children.

# 3. Explanation of the GLOBAL BUSINESS COALITION FOR EDUCATION

The GEP has worked to identify significant education platforms and initiatives, and determine their potential to contribute to its mission to develop an accessible, relevant, and focused global education platform that holds the potential to close the global skills gap preventing marginalized populations from employment. Through wide-ranging dialogue with relevant experts and commercial partners, the GEP identified five potential models for how to address this gap (GBC-Education 2014). At a high-level meeting held by GBC-Education during the United Nations General Assembly (UNGA) week 2014, 'model four' was identified as the most appropriate approach forward for the GEP (see annex 6.7). This model was then refined in an iterative design process throughout the pilot. In current form, the model is characterized by the following elements:

- User-generated content creation
- Device agnostic with mobile phone capabilities (smart phones and feature phones)
- Content is locally relevant (for India pilot, available in 9 Indian languages as well as English)
- Decentralized (any teacher, organization, or individual can use the tool independently of those running project)
- Data tracking capabilities through the platform
- Small group of key stakeholders leading different pieces of the project with dedicated staff focused on technical support, promotion, coordination, or content management

The model can be best encapsulated as a global education 'user-generated bottom-up platform' (UGBU) model.

The UGBU platform model enables a range of learning pathways, which are responsive to the needs of learners and scalable to an unlimited number of languages and contexts. These characteristics address the critical skills gap in a way that is pedagogically relevant and effective. Through continued partnerships with key business stakeholders — many already engaged through GBC-Education — the GEP explores the pathways from foundational educational skills such as literacy, through to employment-specific capabilities. The partners play an active role in defining the critical skills that the GEP needs to address, considering their own future workforce needs. The following table describes why the UGBU platform model can be both scalable and effective in addressing this critical skills gap:

Criteria of UGBU platform model	How UGBU platform model is scalable to address the critical skills gap	Why UGBU platform model is effective for bridging the critical skills gap
User-generated content creation	When users generate the content, the content scales naturally with the user base.	Prepares learners to be pro-active independent thinkers who do not only consume digital content, but produce it — a key to being full participants in the digital economy.
Device agnostic and mobile accessible	More easily scalable, because the barriers to entry are low, casting a wider net.	Widely accessible to those who are marginalized.
Locally relevant content	Content that is locally relevant drives usage in areas which are the fastest growing (i.e. low-literacy areas converge with marginalized languages and population growth).	Encourages development of local economies and their integration within the global economic system, enabling content produced in a diversity of languages.
Distributed	Distributed approaches can reproduce organically and without needing centralized permission.	This allows resilient local networks that can respond to local needs appropriately.
Data-tracking capabilities	Growth can be managed and nurtured when it is properly understood through accurate data.	Rich data allows constant improvement and refinement.
Shared leadership	Shared leadership is scalable because it does not rely on one organization or individual to lead, and capabilities can expand and contract more readily.	Shared leadership allows sustainable partnerships that ensure voices are heard from a fuller range of stakeholders.

# 4. Review of the Pilot Project

GLOBAL BUSINESS COALITION FOR EDUCATION

## 4.1. Approach of the YourStoryIndia pilot

The pilot adopted the UGBU platform model and has been central in the ongoing refining of the model, providing the opportunity to test the assumptions and values within the model, apply them in practice, and share that learning for the benefit of the wider sector. Therefore, it was logical to approach the pilot in partnership with other initiatives. The pilot was a writing contest held in India, called YourStoryIndia. The contest encouraged young people to read more and crucially to also produce their own content and express their own stories.

The intention of the YourStoryIndia pilot was to explore whether a platform could make a systemic and scalable contribution to addressing the skills crisis through promoting literacy. It was decided to limit the geographical reach of the pilot to India. This was an appropriate decision based on a context of urgent need and capable partners. India was specifically chosen because of the skills gap within the population, the high level of mobile phone penetration, the large and diverse population with many languages, and the potential to learn lessons applicable for future expansion of the YourStoryIndia pilot and related programs.

The YourStoryIndia pilot provided the opportunity to work collaboratively with other partners. It brought together the Wattpad and Twitter publishing platforms — the former focused on long-form content and the latter focused on promotion of the initiative, short-form content, and easy on-ramps to user engagement. The pilot prepares learners to be pro-active independent thinkers who do not only consume digital content, but produce it — a key to being full participants in the digital economy. Through encouraging submissions from across the country and making the platform widely accessible in a range of languages and formats, the contest was an ideal way to test the possibilities for locally appropriate, user-generated content.

#### 4.2. Partner selection

Each of the partners was selected for the YourStoryIndia pilot because of the way in which they provided an opportunity to test the assumptions of model four within an applied setting.

The following partners have collaborated on the pilot project:

- Wattpad: hosted contest on platform and promoted throughout
- Twitter India: promoted contest in India and contributed to prizing
- HP: donated laptops as prizing and contributed to conceptualization phase
- STiR Education: promoted contest to network of teachers
- Teach for India: promoted contest to network of teachers

In addition, the following three partners have expressed strong interest in participating before the end of the YourStoryIndia contest in March 2016:

- •Idea Cellular: mobile network operator (MNO) helped to amplify the reach of the contest
- •Times of India: publicity and promotion
- •Jaipur Literature Festival: prizing and promotion

Furthermore, Twitter is enlisting the help of various partners such as celebrities and brands to promote the contest on their platform over the course of the Jaipur Literature Festival to raise its profile.

## 4.3. How the YourStoryIndia pilot addresses the goals of the model

The activities of the YourStoryIndia pilot are closely linked to the different criteria built into UGBU platform model. The six main criteria of the UGBU platform model are listed below, alongside the evidence currently available from the pilot.

Criteria of UGBU platform model	Evidence
User-generated content creation	Over 230,000 submissions to Wattpad by Indian writers within a few months
Device agnostic and mobile accessible	87% of readers accessed via mobile web or apps
Locally relevant content	Submissions in ten languages from all across India
Decentralized	Local leadership and partnerships with schools across the country through STiR Education
Data-tracking capabilities	Rich data on the reading patterns of 1.4m users who spent a total of 1.7m reading hours on the platform
Shared leadership	Shared leadership by Twitter and Wattpad, with support from HP and STiR Education

## 4.4. Early findings

As of the time of publication — two months prior to the end of the contest and post project evaluation — there have been 1.4 million users engaged with the pilot project, and over 230,000 stories submitted. It is not yet possible to make detailed analysis regarding the impact on literacy as the YourStoryIndia contest is ongoing through the end of March 2016. However, 1.7 million hours of reading have already been completed on the platform, time spent reading is reported to have increased by 19%, and time

spent reading local content is reported to have increased by 35%. This combination provides a highly promising indication of the levels of engagement, and the favorable engagement thus far demonstrates the ongoing potential of the GEP. It is particularly noteworthy that engagement has not only been from the young people who are reading and writing stories, but between the partners, who have plans to develop their collaboration beyond the current pilot.

It is apparent that the development of a UGBU platform model to develop youth skills has multiple dependencies. The experiences of the GEP through the YourStoryIndia pilot thus far have provided thought leadership within the education technology sector regarding the importance of cross-sector and multi-stakeholder collaboration, usergenerated content, and mobile phones as a tool for literacy. Each of these has played an important role in the development the GEP model and YourStoryIndia pilot and will continue to do so in future iterations.

## Cross-sector and multi-stakeholder collaboration

A global education UGBU platform model is dependent on effective partnerships. These should extend beyond traditional lines, align around a common mission, and have a strategy for effective implementation. The GEP has demonstrated this by building a collaboration between non-governmental organizations (NGOs), hardware and software providers, and mobile network operators (MNOs). The GEP has also demonstrated the importance of considering scalability from the outset and planning for growth in partnership. The experience of the pilot has demonstrated how effective cross-sector partnership requires a full understanding of the different motivations of each partner.

Wherever possible it is necessary to align the priorities that different partners have for engaging in global education. Effective partnership can be based on a range of motivations, as long as there is transparency regarding the nature of the motivations. It has also highlighted the need for regular facilitated communication and an understanding of the context within which the partnership is operating. In identifying each of these factors, the YourStoryIndia pilot fits well with broader research regarding partnership effectiveness (e.g. Marriot and Goyder 2009, Tennyson and Harrison 2008, Unwin 2009, Draxler 2008).

## **Reflections from partners**

The core element of the YourStoryIndia pilot, the story writing, took place on Wattpad's platform. Wattpad has been at the heart of the partnership and aspires to expand their activities in India and build on the user-base that was already in the country prior to the launch. They made the following observations regarding the partnership:

'The biggest strength of the contest has been the breadth of involvement we have had from GEP and other partners. This is helping us to develop the platform, and helping to push forward our goals for promoting literacy, and really test the bounds for how Wattpad could impact literacy.'

'It was a really positive partnership experience, with shared goals on both sides.'

It was necessary for the YourStoryIndia pilot to be firmly grounded in a bottom-up approach, taking account the long-term global thinking of GBC-Education, and the realities of taking the first step in a complex context and putting that into practice on the ground. Rishi Jaitly explained that it was the way in which the GEP is grounded in reality that drew Twitter into the partnership:

'What was compelling for me was that from an educational change perspective, this is very bottom-up — I believe in people power, and I thought the GEP resonated with that idea. We have lots of partners in lots of capacities ... but it is rare to come across anyone that is focused on something that is actually engaging on a bottom-up level.'

Twitter, as the largest partner, with an established user base and significant capabilities on the ground in India, facilitated several of the relationships that helped to expand the reach of the YourStoryIndia pilot. Twitter India reflected on some of the important aspects of the partnership:

'The most significant strength about the GEP is the assumption it makes about children — that children have potential that hasn't been realized, not because of problems of capacity, but because they haven't been able to express what they already know. What I have been impressed by is that the YourStoryIndia pilot aims to recognize, unlock and showcase the potential already in these young people, which is the most important first step to being able to encourage learning. I am proud to be part of something that recognizes the present potential of young people, as well as their future potential.'

#### Open and user-generated content

The democratizing power of online learning programs is widely heralded, both generally by 'web 2.0' platforms that lower the barriers to content creation, and particularly by Massive Open Online Course (MOOC) platforms such as Coursera and EdX. Yet for

many marginalized communities, the digital revolution has amplified their exclusion due to a lack of infrastructure and resources in their language. The majority of the world's languages are poorly represented on the Internet, with only 13.6% of the web in the language of two-thirds of the world (4.7 billion speakers) (Broadband Commission 2015).

In order to ensure that marginalized communities can participate fully in the digital economy and workforce, they must be able to contribute content in a broad range of languages. Therefore, one important benefit of open and user-generated content lies in its scalability, as it is both a driver and a source of engagement it has the potential to facilitate exponential, organic growth. It is clear that significant user-generated content is necessary in order to provide the scale of resources required to bridge the skills gap. The likely appropriateness and relevance of content created by members of a marginalized community to meet the needs of that community is an additional benefit. Resources taken for granted by many — such as Wikipedia — are user-generated and facilitate the potential for information to be presented in a way that is accessible for various language groups.

The YourStoryIndia contest is testing the potential of user-generated content in one of the most linguistically diverse countries in the world. While there are inherent challenges, with some languages lacking full localization for primary software platforms, the YourStoryIndia pilot has so far provided the opportunity to test the capacity for a diverse set of communities to share their stories. This component has been a resounding success, with members of at least ten language groups participating in the program. In addition, stories were shared in languages, which are not only underrepresented on the web, but also have few written materials available in any digital format.

Allowing and encouraging the creation of stories in a wide range of languages fosters greater interest and includes learners who might be unable to access content in other languages. Additionally, when there is a paucity of content in a given language, each book or story in that language garners greater interest, as well as sparking interest in creating more stories. The YourStoryIndia pilot provides evidence of the possible successes in first steps towards user-generated content for bridging the skills gap. There is significant potential for further exploration regarding the ways in which these learnings can be channeled into encouraging the development of more user-generated educational content.

#### Mobile technology as a tool for literacy

Mobile phone users must gain basic literacy and numeracy skills if they are to be able to utilize this increasingly common communication channel. Mobile phone use can be leveraged by capitalizing on the opportunity to enhance literacy beyond basic messaging towards a more full engagement with written content.

While low literacy can be a barrier to mobile use, mobiles can be used by people even if they are only functionally illiterate (technically able to read, but not well enough to manage many tasks necessary for employment). This can provide an impetus to develop literacy skills to a level that aids employability, further incentivizing learning without additional cost. Foundational work has already been conducted by the GSMA, BBC, UNESCO, and the British Council regarding the use of mobile phones to enhance literacy, and the GEP can effectively build on this work (e.g. GSMA 2015, BBC Media Action 2015, UNESCO 2014).

The YourStoryIndia pilot builds on the opportunity presented by India's high mobile penetration rate of 79% (TRAI 2015) to encourage meaningful engagement with literacy. The intention is that mobile users can use their developing literacy skills to participate in the digital economy, rather than remaining functionally illiterate. With mobile phones as a driver for enhanced literacy, the productivity and employability of the workforce of the next generation could help to bridge the critical skills gap.

# 5. Summary and Recommendations

## GLOBAL BUSINESS COALITION FOR EDUCATION

The global education platform YourStoryIndia pilot has demonstrated the role of technology as an enabler and accelerator of solutions to educational challenges, rather than a solution in and of itself. The GEP has demonstrated the potential of a platform that works to bridge the skills gap to productive employment. The GEP will continue to evolve based on future learning from the YourStoryIndia pilot.

The activities completed thus far provide an important foundation of experience that can be further developed. There are various routes forward, through which an ongoing substantive contribution could be made to address the global skills crisis. Each of these potential routes forward will have an associated set of opportunities and constraints that require ongoing exploration. Five of these are outlined briefly below, as an illustrative rather than comprehensive suite of options.

**1. Identify research priorities:** Build upon learnings from the pilot, identify key opportunities for further development of technology-enhanced educational interventions serving the most marginalized populations globally, and leverage research to identify needs, existing tools, and effective solutions to global learning gaps.

**2. Build an advocacy network:** Develop in the role of a global 'champion' committed to promoting and advocating for good practice, building a network that can influence what happens across the sector as a whole.

**3. Develop an interactive hub:** Provide applied thought leadership to the sector to continue to address the skills gap, broker and incubate partnerships, facilitate spin-off initiatives, host high-level events, and connect like-minded organizations for maximum collaborative impact.

**4.** Launch additional pilots: Engage in a series of pilots focused on the use of education technology to address the skills crisis and track the learning in a systemic and integrated way in order to contribute to the sector by building the evidence base for what works, what does not work, and why.

**5. Expand the platform:** Continue to develop the platform to draw in content from other providers, impose standards, structure, and multiple pathways applicable for different skills gaps and in particular work to tailor content and accessibility for different types of marginalization — including access in remote areas and use by people with disabilities.

Within these five opportunities, there is significant need to focus on education in emergencies, particularly given the overarching focus of the GEP to close the global skills gap by serving marginalized youth globally. In light of this, the following sections provide specific recommendations for translating learnings from the GEP to refugee contexts and looking towards certification as a means to serve youth populations in these contexts.

#### 5.1. The greater need for technology solutions, particularly in education in emergencies

At the end of 2014 there were 59.5 million people forcibly displaced worldwide due to conflict, generalized violence, natural disasters, human rights violations and persecution (UNHCR 2015). This is the highest number of forcibly displaced people since the Second World War. Education has a vital protective function in emergencies; it builds resilience and provides future-oriented activities. There are many barriers to education in emergencies, and many factors that make students at risk of dropping out (Gladwell and Tanner 2014, Dryden-Peterson and Giles, 2010, CARE 2013). Appropriate use of technology can enhance safety, helping students overcome barriers and remain in active education. The YourStoryIndia pilot provided a valuable opportunity to learn lessons regarding effective interventions. From this experience, ICT4EiE is a context in which a global education platform could make a concrete and scalable positive impact.

The mission of the GEP is to serve marginalized youth with an accessible, relevant and focused learning platform that will provide the skills necessary for employment. These include basic skills such as numeracy and literacy, other 21st century skills, and qualifications and degrees. Those affected by these skill gaps include not only those who face economic and educational disadvantage around the world, but also those who have been displaced by conflict and emergencies. The prominence of refugees, and the clear need for education opportunities for those facing these difficult circumstances is one of the next contexts which the GEP hopes to address.

There are many pre-existing innovative examples of the vital role of technology in making EiE responses more effective such as JC:HEM and Conn@ctNow (see annex 6.4). However it is also important to note that there is no one set of best practices with technology that are applicable to all contexts in EiE. Many of the most innovative solutions have significant corresponding weaknesses and this should be understood when considering replicability. The GEP believes that it is vital that the international community prioritizes investment in the appropriate use of technology within EiE.

This investment should always seek to collaborate with, and enhance, established humanitarian response mechanisms rather than operating in parallel. To do so requires a dedicated focus on specific priorities (see annex 6.6).

In addition, in order to best serve the needs of youth affected by conflict, there may be significant potential in the GEP adopting the position of a standards body for certification of educational partnerships, which effectively bridge the critical skills gap (see annex 6.8).

## Conclusion

Ultimately, the solutions put forth by the GEP should be made available to all children, including those most marginalized who may have been left outside of the scope of the YourStoryIndia pilot. The contributions of this pilot represent just one potential solution, operating under the assumption that literacy leads to employable skills required by a 21st century workforce. As the YourStoryIndia contest is ongoing, final results have yet to be tallied. A great deal of additional research, data, innovation and ambition — particularly in financing — is needed to explore further solutions to take to scale.

## 6. Annexes

#### 6.1. Bibliography

Anderson, L., 2011. Demystifying the Arab spring. Foreign Affairs 90, 2–7.

BBC Media Action, 2015. Millions of Bangladeshis learn English with BBC Janala http:// www.bbc.co.uk/mediaaction/where-we-work/asia/bangladesh/bbc-janala

Broadband Commission, 2015. The state of broadband 2015. http://www. broadbandcommission.org/documents/reports/bb-annualreport2015.pdf

Draxler, A., 2008. New partnerships for EFA: building on experience. Paris: IIEP/UNESCO and World Economic Forum.

Dryden-Peterson, S., 2010 Politics of higher education for refugees in a global movement for primary education. Refuge Journal Vol 27 No 2.

Gladwell, C and Tanner, L., 2014. Hear it from the children: why education in emergencies is critical. Save the Children/Norwegian Refugee Council.

Global Business Coalition for Education, 2014. Towards a Global Education Platform: Potential Models for Harnessing Technology to Promote Education as a Global Public Good September 2014 http://gbc-education.org/wp-content/uploads/2015/05/GEPreport.pdf

GSMA, 2015. Accelerating Digital Literacy: Empowering women to use the mobile internet http://www.gsma.com/connectedwomen/wp-content/uploads/2015/06/ DigitalLiteracy\_v6\_WEB\_Singles.pdf

Hoffman, M., Jamal, A., 2012. The youth and the Arab spring: cohort differences and similarities. Middle East Law and Governance 4, 168–188.

Marriot, N. & Goyder, H., 2009. Manual for monitoring and evaluating education partnerships. Partnerships for Education, UNESCO Publications. www.iiep.unesco.org/fileadmin/user\_upload/Info\_Services\_Publications/pdf/2009/Mariott-Goyder\_Partnership.pdf

Refugee Support Network, 2011. 'I Just Want to Study': Access to Higher Education for young refugees and asylum seekers. London.

Tennyson, R. and Harrison, T. 2008. Under the spotlight: Building a better understanding of global business–NGO partnerships. London: International Business Leadership Forum.

Telecom Regulatory Authority of India (TRAI), 2015. http://www.trai.gov.in/ WriteReadData/WhatsNew/Documents/PR\_No.65\_TSD\_Sep\_15.pdf

UNESCO, 2014. Reading in the mobile era: A study of mobile reading in developing countries http://unesdoc.unesco.org/images/0022/002274/227436E.pdf

UNESCO, 2015. Global Monitoring Report. http://en.unesco.org/gem-report/background-papers.

UNHCR, 2015. Key facts and figures. http://www.unhcr.org.uk/about-us/key-facts-and-figures.html

UNHCR, 2014. Global Child Protection, Education and SGBV Strategy Implementation Report. Geneva.

UNHCR, 2014. Global Trends: Forced Displacement in 2014. Geneva. Unwin, T., 2009. ICT4D implementation: policies and partnerships. In Unwin, T. (ed) ICT4D. Cambridge: Cambridge University Press, 125-176.

## 6.2. Examples

The following section summarizes three major MOOC platforms, two targeted initiatives, a specific program, and a platform. Each of these examples has a direct link to the UGBU platform model and the associated criteria. The examples demonstrate the potential of the UGBU platform model to develop into an increasingly substantial movement to address the global skills gap. It is clear that the pilot program was somewhat limited in scale and it is therefore necessary to draw as much as possible on good learning from other relevant contexts in planning the appropriate route forward.

## Three major MOOC platforms

EdX (along with Coursera and Udacity) is one of the 'big three' MOOC platforms, which intends to 'democratize' education, and is moving from simply providing access to online courses from top universities, to launching new for-credit pathways. These new initiatives are pushing edX closer towards brick and mortar universities, which have recognized accreditation. Alongside edX, Coursera is the largest platform offering university courses, with an aim to 'revolutionize what it means to have access to university education', according to chief executive, Rick Levin. The future growth trajectory for Coursera is towards career-oriented courses for Asian students, and they have developed the partnerships to enable this, offering over 140 Chinese-language courses, amongst others. Udacity has taken a third approach, by focusing on the learning needs of corporate partners. One example of this is a 'nanodegree' offered by Google on Android application development on Udacity's platform. This is the first engineering certification created and certified by Google, and represents a move towards MOOCs being integrated with employment needs.

## Two initiatives to address the critical skills gap

In addition to these MOOC platforms, consultancy firms McKinsey and Accenture have focused their efforts through two initiatives: (1) Generation, and (2) Skills to Succeed. The first of these, Generation, is a McKinsey Social Initiative designed to close the gap and improve employment prospects for young people. Generation launched two pilot programs in the US, focusing on healthcare, and in Spain, focusing on web development and digital skills. Skills to Succeed is an Accenture Foundation initiative developed to create job skills training and placement opportunities in China, in partnership with Save the Children. Recent multi-million dollar grants from the Accenture foundation will allow Skills to Succeed to expand within the region to Bangladesh and Vietnam.

#### WarChild programme

War Child Holland's Conn@ctNow programme supports children in war-affected areas through the use of ICT and media. Their commitment is to unite complementary expertise and experience in the areas of technology, knowledge, research, and commerce to reach, support and activate children and young people living in conflict affected areas.

## Project Literacy: a facilitating hub

Project Literacy, a partnership convened by educational publisher Pearson, tackles illiteracy with everything from practical tools, resources and apps, to advocacy campaigns. The broad coalition of partners is coming together to make significant and sustainable advances in literacy over the next five years so that by 2030, no child will be born at risk of poor literacy.

## 6.3. Interviews conducted during research

Name of organisation	Name of interviewee	Website	Relevance
Twitter	Rishi Jaitly, Twitter VP of ME and Asia	@TwitterIndia	GEP Partner
Wattpad	Ashleigh Gardner	www.wattpad.com	GEP Partner
Wattpad	Kelly Steen	www.wattpad.com	GEP Partner
Global Education Platform	Adam Braun	gbc-education.org/ gep	GEP Team
Global Education Platform	Julia Firestone	gbc-education.org/ gep	GEP Team

## 6.4. Projects reviewed during research

Name of project	Website
INEE Technology task team	www.ineesite.org/en/task-teams/technol- ogy
mEducation Alliance	www.meducationalliance.org
All Children Reading	www.allchildrenreading.org
JC:HEM	www.jc-hem.org
iMlango	www.imlango.com
STiR Education	www.stireducation.org
Teach for India	www.teachforindia.org

## 6.5. Promoting good practice in the sector

These eleven questions are designed as a constructive tool to help organizations using technology in education to reflect on and improve their approaches (some are more or less relevant / applicable in different contexts).

	The Question	Why it Matters
1	Does this intervention centralize the role of teachers in its design and implementation?	For an education technology program to be effective in the long term it requires sustained, motivated engagement from teachers.
2	Does this intervention integrate with the broader education system and the national curriculum?	Education technology program should not exist in a silo – content should match the national curriculum and contribute to national education agendas.
3	Is the pace or anticipated change realistic in the context?	It takes a long time to instigate a substantial shift in education through technology, especially in areas with few resources.
4	Is the program appropriate considering the pre-existing infrastructure levels / pre-existing exposure to technologies?	Appropriate program design depends on level of access to technology within the beneficiary community.

	The Question	Why it Matters
5	Is the program applicable for the context or imported as a package from elsewhere?	It is important to learn lessons from other places, but what works in one location is not guaranteed to work somewhere else.
6	Is there a robust plan for sustainability of the intervention after the program funding comes to an end?	Promising initiatives often fail to consider the ongoing costs (such as electricity, connectivity, mobile phone bills) of an intervention and where the money will come from for each of them.
7	How will the technology be integrated rather than being an attractive add-on that does not actually transform practice?	Isomorphic mimicry is a significant threat to education technology program – the appearance and language of significant change without the substance.
8	Is the program driven by demand of the users?	Many programs are launched without investing time and resources understanding what the demand is within the user community. This leads to higher failure rates.
9	Is the program structured in such a way that facilitates and promotes user-generated content?	Open platforms foster a culture of co- creation and collaboration within the intervention.
10	Does the program make maximum benefit of the strengths of different sectors?	Cross-sector partnerships require significant ongoing work in order to operate effectively and add value to an intervention.
11	Is the program tracking its effectiveness and sharing learning?	All education technology interventions should be seeking to add to the learning and evidence base regarding what constitutes good practice.

## 6.6. EiE ten priorities

- 1. Using targeted technology in both rapid onset and protracted crises
- 2. Utilizing approaches that consider the benefits of technology across the education continuum (pre-primary level, progressing through primary and secondary, and culminating in tertiary education)
- 3. Ensuring that the benefits of technology are available for the most marginalized within an emergency context
- 4. Providing interventions that are appropriate according to the pre-existing exposure to technology among the displaced population
- 5. Ensuring technology is introduced in a manner that is appropriate in the sociocultural context
- 6. Using open sharing of data wherever possible (technology for tracking / awareness raising)
- 7. Using technology to enhance accountability in education to affected communities
- 8. Ensuring that technology is used to promote skilled refugees for knowledge sharing through appropriate platforms
- 9. Considering the particular role of using technology to enhance higher education in EiE (Gladwell and Tanner 2013, UNHCR 2014, Dryden-Peterson 2010)
- 10.Enhancing research and evidence building regarding the most transformative ways in which technology can be used to enhance EiE

## 6.7. GEP Model 4



#### 6.8. GEP's potential role in standards and certification

In order to best serve the needs of youth affected by conflict, there may be significant potential in the GEP adopting the position of a standards body for certification of educational partnerships, which effectively bridge the critical skills gap. One of the most significant gaps in certification and accreditation of education platforms is in courses certified by the private sector, which are easily accessible for a broad population of young people who lack these skills. This addresses the problem of creating an actual software platform which becomes yet another competitor, or yet another pathway. It is likely that creating another actual platform could confuse learners, and contribute to them becoming overwhelmed with choice. It also addresses the challenge of being a facilitating platform which is essentially a knowledge hub, where the need to be exhaustive in curating undermines the focused objective of bridging the skills gap. In order to be a standards body for certifying pathways to bridging the skills gap, it would be necessary for the GEP to:

- Clarify the objective of its model with concrete criteria (against which specific initiatives can be evaluated)
- Create models for partnerships based on the learning from pilots such as the one in India
- Articulate and specify 'learning pathways' which can lead to employment (like tracks, where different modules earn different certification)
- Use its considerable political and corporate influence to gain international recognition for the importance of its certification

This constitutes a logical continuation of the UGBU platform model without duplicating valuable pre-existing initiatives. It avoids becoming another online learning platform (such as edX, Coursera or Udacity) or another information hub (such as Pearson's Project Literacy), which requires a focused issue (such as literacy) rather than a set of related issues that must be adaptable to learners in different contexts. A knowledge hub can also lead to false expectations of achieving something, when the access barrier is often not bridged through this approach, as it requires (to some extent) the target group seeking out the knowledge in the knowledge hub out of intrinsic interest, which often leads to elite capture rather than a broadly popular initiative. The participative structure of the proposed model with a focus on community validated user-generated content would ensure that the dangers outlined above are avoided.

This approach would allow the GEP to maintain its profile of campaigning and advocacy, which plays to its strengths and unique selling proposition. It would also allow the GEP to call its partners to action in a way that both engenders collaboration and allows competition, in line with their corporate remits. Most importantly, this approach fills a major global need, builds on the activities of others, and could catalyze key stakeholders from the private, public and third sectors to increase their coordinated efforts to address the critical skills gap meaningfully and without reproducing the efforts of others.