From Crisis to Classroom: A Global Blueprint for Teacher Retention

Contents

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Foreword

In response to the pressing educational challenges highlighted by the 2022 UN General Assembly, HP and Bett embarked on a collaborative initiative to address these issues head-on. Launching a series of Senior Leadership Roundtables across the globe, we convened a broad and diverse group of stakeholders. Our goal wasn't just to pinpoint solutions, but to commit to implementing them.

With a projected gap of 44 million teachers worldwide by 2030, retaining quality educators and ensuring equitable education has remained at the forefront of our roundtable discussions and was our title topic in 2024. This roundtable notably incorporated input from students and educators, enriching the dialogue with firsthand perspectives. Recognising that the challenges faced by teachers extend far beyond the classroom, the discussions underscored the pivotal role technology can play in either exacerbating

or ameliorating their experiences. Getting it right will be pivotal in stemming the loss of teachers everywhere.

Bett and HP remain steadfast in their commitment to convening leaders from across the education ecosystem to drive solutions, informed by and in collaboration with those who are impacted most - teachers and students.

> "Addressing this crisis demands urgent and concerted action, including investment in teacher training, recruitment strategies and policies to improve retention and equitable distribution of educators. The future prosperity of nations hinges on our ability to bridge this gap and ensure every child has access to the transformative power of quality education."
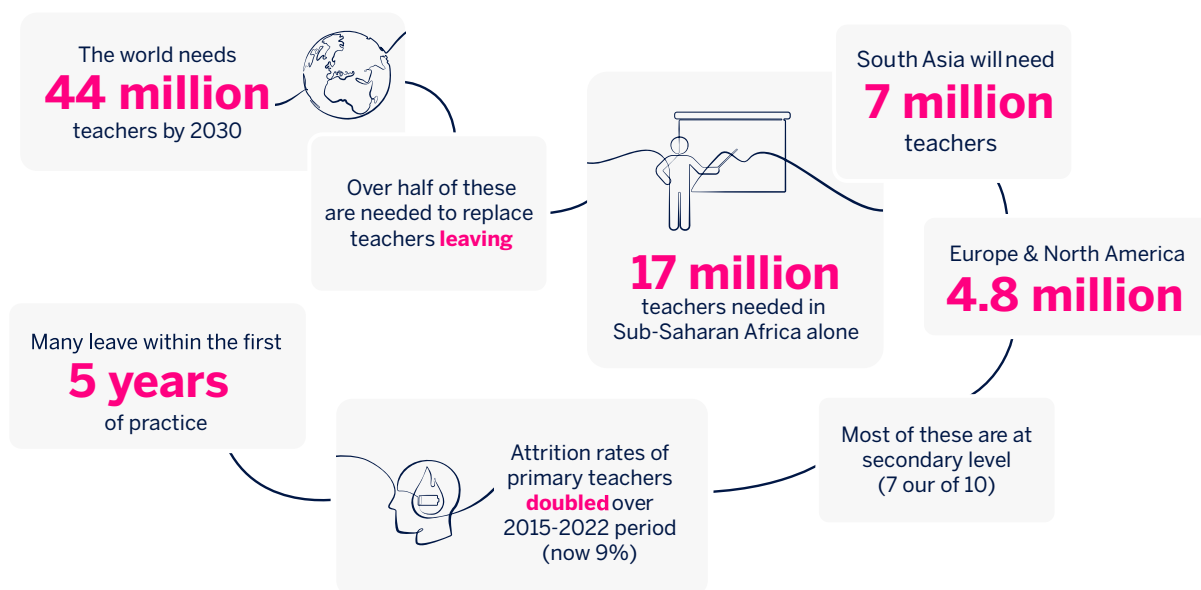>
> Charles Radman, Global Head of Education, HP

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1   United Nations. (2023). Warning Over Half of World Is Being Left Behind, Secretary-General Urges Greater Action to End Extreme Poverty, at Sustainable Development Goals Progress Report Launch.

Executive Summary

The world faces a looming crisis in teacher recruitment and retention, with a staggering need for 44 million teachers by 2030. This crisis threatens to profoundly affect individual life outcomes, community stability, and national economies - exacerbating disparities between the rich and the poor through compromised education quality. Understanding the root causes of this crisis, both in attracting people to the profession and retaining them, demands a departure from wholesale approaches. While universal issues like professional status, pay, and workload are common causes of both retention and recruitment, region-specific challenges also require attention. Sub-Saharan Africa grapples with explosive population growth, while Europe and North America struggle with retention amid declining birth rates. Sub-Saharan Africa requires solutions focused on teacher recruitment and training while Europe and North America need to look more to strategies to retain the workforce.

The world needs
44 million
teachers by 2030

Over half of these are needed to replace teachers **leaving**

South Asia will need
7 million
teachers

17 million
teachers needed in Sub-Saharan Africa alone

Europe & North America
4.8 million

Many leave within the first
5 years
of practice

Attrition rates of primary teachers **doubled** over 2015-2022 period (now 9%)

Most of these are at secondary level (7 our of 10)

Effectively addressing these challenges necessitates a paradigm shift towards co-creation with teachers, students, and communities. Too often, teachers have been subjected to solutions imposed from above, based on assumptions of their needs. Instead, we must engage in genuine dialogue, acknowledging that teachers are experts in their field and key stakeholders in educational reform. Collaborative efforts with educators, learners, and communities can lead to contextually relevant solutions that empower teachers, improve student outcomes, and strengthen community engagement.

Issues affecting teacher recruitment and retention, as identified by participants at all of the Bett x HP roundtables are:
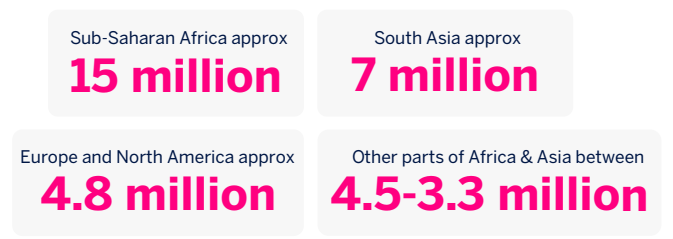
Furthermore, technology and AI hold promise in bridging short-term education gaps and supporting long-term teacher development. From personalised curriculum delivery to fostering inclusive learning communities, technology can amplify the voices of teachers and students, facilitating co-creation and innovation in education.

To address the impending crisis comprehensively, we call upon policymakers, education leaders, academics, and practitioners to embrace a co-creative approach. Let us join forces in understanding the nuanced challenges of teacher recruitment and retention, centering the voices of educators and communities, and leveraging technology to build a more equitable and sustainable future for education worldwide.

1. Training and continuing professional development
2. Teacher pay
3. Professionalism
4. Wellbeing
5. Agency
6. Working conditions, including workload
7. Isolation

The Nature of the Problem

We have a projected global deficit of 44 million teachers by 2030. This shortage pertains to almost every country, every continent will be impacted by this, if we do not act fast.

Sub-Saharan Africa approx	South Asia approx
15 million	**7 million**

| Europe and North America approx	Other parts of Africa & Asia between
4.8 million	**4.5-3.3 million**

[1]

There are multiple reasons for this global teacher crisis. In some parts of the world increased birth-rates have increased demand for teachers, for instance in Sub-Saharan Africa, while in other regions the underlying problems are attracting people into the profession and then keeping them there. Conflict plays a role. At the Bett x HP Asia roundtable, Chin Wei from Cambodia explained that his country continues to recover from the atrocities during the Khmer Rouge years where 90% of the county's teachers were executed.
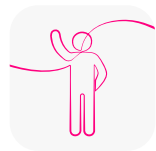
The situation is complex.

Rural areas have teacher recruitment and retention issues which need a different approach to urban areas.
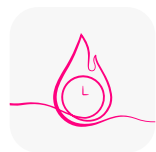
Some phases which have wider gaps than others, for instance the primary sector which has seen a jump in attrition rates of almost 10% in the last few years [2]

Attrition rates are higher for male than for female teachers

Some subject areas suffer more than others, for instance sciences and maths.

Through the series of dialogues the following causes of recruitment and retention were identified:

Teacher Pay

UNESCO estimates that in over half of ALL countries pay for primary teachers is less than those professions demanding a similar qualification. To give a flavour of teacher pay, the average teacher pay in Sierra Leone is $97 per month and in the DRC and Nepal it is around $130 per month. [3] Fold into this poor career progression which leads to poor remuneration in the future, and we have a very unattractive profession.

The Status of Teaching

A 2018 global report on the status of teachers across 35 countries showed that the average respect ranking for a teacher came 7th out of 14 professions [4]. Our dialogues have focused on the dignity of teachers including the socio-economic status of teachers, giving them more autonomy to innovate, trusting professional judgements, and involving teachers in creating solutions to problems regarding the craft of teaching, the system and wider educational and societal issues.

Working Conditions

55% of teachers state that the current workload burden is unsustainable [5]. In many localities the physical working environment is unpleasant, and often unhealthy, to work in. A lot of teachers are in charge of large classes. In Central African Republic the teacher student ratio is 1:83 [6]. Many teachers report significant stress and poor mental health, in part due to the cultures of low trust with high accountability in which they operate.

Professional Growth

Lack of professional growth opportunities further demotivate educators, leading to stagnation and dissatisfaction. Clear progression pathways and leadership opportunities are essential to retaining talent and fostering a conducive work environment.

Migration

These teachers are not leaving the profession but moving. The recent UNESCO report on teacher shortages concluded that the outflowing of teachers affects all regions but with some regions suffering much more than others, for instance, Jamaica [7].

Additionally, while technology is seen as part of the solution, its implementation presents challenges, including EdTech burnout, inadequate Continuing Professional Development (CPD), and a technology competency gap between teachers and students.

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[1]   UNESCO Global Report on Teachers, 2023
[2]   UNESCO Global Report on Teachers, 2023
[3]   Are Teachers in Africa Poorly Paid? Evidence from 15 Countries. Evans, D., Yuan, F. and Filmer, D. 2020
[4]   Global teacher Status Index, The Varkey Foundation, 2018, p.12
[5]   The Global Report on the Status of Teachers 2021, ESI
[6]   The World Bank Education Database
[7]   UNESCO Global Report on Teachers, 2023

Approaches

> ## "The best way to know how to attract and retain teachers in your system is to know your system."
>
> Jane Mann, London roundtable, 2024"

All of the Bett x HP roundtable discussions emphasised the importance of the approach to solving issues - not just the solutions themselves. Key considerations such as accessibility, usability, equity, and ethics must underpin any proposed solutions, particularly those involving technology and AI. Six approaches have emerged from these dialogues:

1. **Better Evidence of What Works:** Solutions, especially tech-based ones, should be based on solid evidence rather than assumptions, considering the rapid pace of technological evolution and the pace of research.

2. **Co-Creation:** Involving teachers in problem analysis, solution design, and evaluation can lead to more effective and practical solutions, as seen in Finland and Zambia.

3. **Collaboration:** Genuine partnerships between organisations, even competitors, can foster innovation and accelerate progress. Connecting up research and innovation and amplifying it has the potential to transform the pace and agility of global education systems.

4. **Long-Term Planning Horizons:** Education systems need to plan beyond political cycles to ensure sustainability and impactful change. The average Minister for Education can expect to stay in post for a little over a year [8], taking policies with them - an unsustainable model not built for impactful change.

5. **Reverse Engineering:** Edtech solutions should focus on simplifying and enhancing the teaching experience, freeing up teachers to teach more effectively.

6. **Context Is King:** Policies and products should consider diverse regional contexts and infrastructure limitations to ensure practicality and equity, as highlighted in discussions about education in India and rural areas during roundtable sessions.

These approaches collectively underscore the need for a holistic and inclusive approach to tackling education challenges, with a focus on evidence-based, collaborative, and context-sensitive solutions.

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[8]   Government reshuffles: the case for keeping ministers in post longer. Institute for Government. 2020

Solutions

The consensus among delegates at all the roundtable discussions is that education should be a top priority for governments worldwide, with spending on education seen as an investment in future prosperity rather than an expense. Countries like Singapore and Korea have demonstrated this by prioritising education over 10 years ago and subsequently experiencing significant economic growth [9].

Teacher pay is a critical issue intertwined with the importance of education. Many countries undervalue teachers, neglecting to provide them with the dignity, recognition, and remuneration they deserve. While technology and AI have limited impact on solving the teacher pay crisis directly, they could help by shaping public perception and awareness about the value of teachers.

Despite the challenges, there are promising practices worldwide that demonstrate how technology and AI can address various aspects of the teacher recruitment and retention crisis. However, a word of caution. Bias in AI poses significant challenges, especially from an equity and inclusion angle. Skewed training data, algorithmic design, and lack of diversity in development teams are all factors in the inherent bias of AI. Training data may reflect societal biases, leading to biased decisions. Algorithms optimised for certain metrics may inadvertently discriminate against particular demographic groups. Addressing bias requires transparency about how AI decisions are made, allowing us to identify patterns of bias and discrimination. Regular audits and monitoring in real-world applications are also essential to identify and address biases over time.

Workload

"Can we understand their workflows, and say, how can we make that faster? How can we shorten the amount of time to do that task? Technology has a tremendous role in improving the lives of teachers. We just need to be very mindful of how we do it."

- Charles Radman

Technology adoption in education should come with clear national accountability lines to prevent it from adding to teachers' burdens. While technology has the potential to reduce workload, it often increases it. Teachers in Ukraine reported needing 58% more time to prepare for lessons when using technology [10] and examples from Singapore and Sweden show that strategic reduction in technology use can alleviate workload issues.

However, there are clearly opportunities for technology and AI to reduce teacher workload by automating administrative tasks, personalising lesson planning and content creation, providing adaptive learning platforms, and facilitating data analysis. AI-powered systems can automate administrative tasks like grading assignments and generating reports, freeing up teachers to focus more on teaching and learning. Personalised lesson planning and content creation powered by AI can cater to individual student needs, while adaptive learning platforms can provide personalised learning experiences and targeted intervention when needed.

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9   OECD, Education at a Glance 2023
10   Olga Budnyk, Adviser to the Prime Minister of Ukraine, reported this at the roundtable in Jan 2024

Teacher Training and Continued Professional Development (CPD)

94%

of countries highlighted in-service and pre-service training as the key determinant in improving quality of teaching.

Source: Transforming Education Summit 2021

Investing in quality CPD is recommended by UNESCO as a key strategy to reverse teacher shortages [11]. Leveraging technology and AI can make training more accessible, engaging, personalised, data-driven, collaborative, and globally connected. Empowerment of teachers is crucial in this effort. For instance, Finland's successful programme of training 'Tutor teachers' as tech experts demonstrates the potential of technology-enhanced CPD. Online learning platforms, interactive tools, remote collaboration, microlearning, and global collaboration through technology can revolutionise teacher training and CPD. We heard an effective example of remote mentoring in the 1 Million Teachers [12] collaboration with HP in which senior executives mentor teachers around the world.

Wellbeing and Mental Health

Technology and AI have the potential to empower teachers to prioritise their wellbeing and mental health by providing access to resources, support networks or online counselling services and tools for stress management and self-care. AI-powered stress detection tools, for example, can analyse data from wearable devices to detect signs of stress and prompt teachers to prioritise self-care, whilst online work-life balance tools can help teachers promote boundary-setting and better time management. However, it's important to approach the integration of technology and AI in education with a focus on human-centric design and ethical consideration to ensure that it truly enhances teachers' lives and experiences.

"The best technology for teachers is the technology that allows them to be freed up to teach more."

- Jane Mann, London roundtable, 2024

Belonging and Communities of Practice

Technology and AI can support the development of communities of best practice by facilitating connections, curating content, organising events, sharing resources, and matching mentors with educators. AI-powered content curation can analyse user preferences to provide personalised recommendations, while AI-driven events can facilitate networking and interactive sessions among educators, fostering a sense of belonging and collaboration among community members.

By leveraging these tools effectively, education systems can create vibrant and supportive communities where educators can thrive, innovate, and contribute to positive outcomes for students globally. Through continued investment in technology and AI, coupled with a commitment to teacher well-being and professional development, the global education community can address the challenges of teacher recruitment and retention.

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[11]   UNESCO Global Report on Teachers, 2023.

[12]   1 Million Teachers | Empowering educators to provide inclusive, gender responsive education to students in the most under-resourced communities around the world.

Roles & Responsibilities

The three Bett x HP roundtables concluded that there needs to be new approaches to combating the teacher recruitment and retention crisis, focusing on leveraging technology to help educators, students and the system more widely. The discussions yielded two key recommendations:

Co-Create with Teachers and Students

Rather than relying on a centralised, top-down approach, there's a call for co-creation where solutions are developed collaboratively with those directly involved in student education.

Contextualise Solutions

Acknowledging the importance of context, it's imperative to understand that solutions must be adaptable and sensitive to the unique circumstances of different regions or communities, both within and across countries, especially across national or rural-urban divides.

With these recommendations in mind, the roles and responsibilities of various stakeholders in the education system need to evolve to implement effective solutions:

1. Policymakers

a. **Commit to Long-Term Planning**
In order to combat the crisis effectively, policymakers should commit to planning over a minimum of ten years and embed technology accordingly. Cross-party buy-in is crucial for sustained reform. We know it is possible, even in countries where there are regular changes of government - we need only look to Finland and Australia where reforms on curriculum as well as other education policy instruments have been formulated and implemented using a longer-term approach.

b. **Base Decisions on Evidence**
From our roundtables we heard that too much policy is based on ideology and assumptions. Ensure that policies are evidence-based and evaluate their impact to determine the most effective strategies.

c. **Facilitate Direct Engagement with Educators**
Open doors for teachers' input to understand issues and test solutions effectively.

d. **Provide Procurement Training**
Offer training in procurement processes, especially concerning IT solutions, to ensure informed and ethical decisions. We have heard evidence that many Ministers do not understand the EdTech market, the range of solutions on offer, and can be easily influenced due to lack of knowledge.

e. **Create an Ethics Framework with Accompanying Regulation**
This will ensure ethical standards are upheld by technology companies and the most effective products and services are procured.

2. Commercial Providers

a. **Collaborate with Policymakers and Educators**
Work closely with policymakers and wider stakeholders in the education system to tailor products and services to their needs.

b. **Establish Customer Insights Panels**
Set up panels involving stakeholders - including teachers and students - to analyse needs and assess the effectiveness of products and services.

3. Researchers

Help Develop a Deeper Evidence Base

This was a clear finding of the final roundtable in January 2024. Borhene Chakroun from UNESCO was keen to emphasise the importance of a deeper understanding of the triggers for teachers entering and leaving the profession and for the impact technology could have on these issues. This research may well focus on the global picture, but we do need to better understand the drivers for the local contexts. It was suggested that there are fellowships of learning founded to expedite this.

4. The Workforce (Teachers and Leaders)

Engage in Policy-making Conversations

Both teachers and school and college leaders need to be willing to be involved in dialogues about changes in education policy. They need to be given adequate compensation for their time, expertise and any projects given to them as a result. We know that those currently in post hold the answers to the questions about the recruitment and retention crisis as well as the workability of proposed solutions.

Pledges &
Taskforce

As a result of these three dialogues and the accompanying research and papers, Bett and HP seek to establish a taskforce to explore the ideas outlined above further. This group will consist of leading EdTech providers, leading policymakers, advisors and those from within the profession. Together, these individuals and representatives will take what has been learned so far and move into the realm of action - starting with pledges.

Through this series of dialogues there are some questions which remain unanswered and some which have arisen. A flavour of these are:

After three roundtables over a year with representatives from over 20 countries, across six continents, we have a clearer shared understanding of some of the challenges of this complex global crisis. More nuanced evidence is always needed to understand, design, implement, review and improve services and products. But collectively, we have at our fingertips some incredible tools with huge potential.

If you would like to be involved as we transition from talk to action then please get in touch!

What part can technology play in all of the proposed solutions including that of teacher pay?

What are the fundamental competencies, skills and knowledge that a digitally literate teacher needs to have? Who else in the system needs to have this level of digital literacy?

How do solutions to address the teacher shortage impact on the global inequity challenge in education? How can we ensure that our solutions meet the demands of goal 4 of the UN's Sustainable Development Goals? [13]

What will the research and evidence plan look like and how long will it take?

What could an ethics framework look like and who would it belong to?

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[13]   This goal supports the reduction of disparities and inequities in education, both in terms of access and quality. It recognizes the need to provide quality education for all, and most especially vulnerable populations, including poor children, children living in rural areas, persons with disabilities, indigenous people and refugee children.

About the
Collaborators

About Bett

At Bett, we bring together educators from across the entire education landscape and 600+ innovative EdTech and resource solution providers showcasing cutting-edge and impactful products and services. We are the the global community for education technology.

Our mission is to change the game for education worldwide by equipping education institutions and governments with the knowledge and tools they need to be effective users and buyers of technology. We are better together.

About HP

All over the world, HP's global education teams are working with Ministries of Education, charities and NGOs to take a renewed look at inclusion, and the fundamental role that education plays in levelling up and bridging the equity gap, as well as the nuanced approaches needed from region to region, country to country and even city to city. Over 107 Million students and adult learners have benefitted from HP's 'Enable Better Learning Outcomes' campaign and they have pledged to Accelerate Digital Equity for 150 million people worldwide by 2030.

About FED

The FED is dedicated to the belief that long-term strategic education planning is vital to the success of countries and their people. In the spirit of collaboration, we provide an independent and neutral space for stakeholders to help shape the future of education.

Our work provides a platform for discussion, debate and solutions so that long-term local, regional, national and global challenges can be resolved.

Useful
Reading

1. 1 Million Teachers
   1 Million Teachers | Empowering educators to provide inclusive, gender responsive education to students in the most under-resourced communities around the world.

2. Asian Development Bank. (2020)
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   The role of lived experience in creating systems change.

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   The Global Report on the Status of Teachers 2021.

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13. International Labor Organization. (2020)
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    Understanding teacher effectiveness to raise pupil attainment.

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    Education at a Glance

18. Reggio Emilia Approach. (2023)
    Reggio Emilia Approach.

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    Out-of-School Children and Youth.

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    Learning losses from COVID-19 school closures could impoverish a whole generation.

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    An Unfair Start: Inequality in children's education in rich countries

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    COVID-19 and Human Development: Assessing the Crisis, Envisioning the Recovery.

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    Asia and the Pacific SDG Progress Report 2022.

36. United Nations. (2023)
    Warning Over Half of World Is Being Left Behind, Secretary-General Urges Greater Action to End Extreme Poverty

37. United Nations Population Fund. (2023)
    Child marriage.

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    Global Teacher Status Index (varkeyfoundation.org)

39. World Bank
    Education | Data (worldbank.org)

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41. World Economic Forum. (2018)
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42. World Economic Forum. (2020)
    These 6 skills cannot be replicated by artificial intelligence.

43. World Economic Forum. (2020)
    We need a global reskilling revolution – here's why.

Special
Thanks

Thank you to the following educators who took time to contribute to the discussion via video submission:

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