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**“Rethinking the Opportunity”:
Chess-in-Schools in the context of Global Innovation
in Education**

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Summary

- Emerging Questions
- Realising need to innovate education systems for us?
- Key Results and Conclusion of the FIDE fact finding mission
- **Discussion:** Gathering the Global Perspectives carefully
- **Future Directions:** How should we act now And why?
- Acknowledgments
- References



Introduction

- Chess-in-schools in a context of Global Education
 - Is it scalable, interoperable and sustainability across cultures?
 - Can it drive strong equity in Global education dialogues?
 - Lead in education central to global thinking scenarios?
- We explore the **perspective of innovation** in education through the lens of chess-in-schools.
- ***What has worked in “Transforming the future of education” (Theme of WISE 2013)” that is effortlessly achieved with chess.***
- Chess-in-schools is a potential to be the *Least Common Multiple* of the core innovation exercise
- Chess-in-schools to

Key outcomes of this Exercise

- Chess-in-Schools is a Global Outreach programme, but for who? <**Ponderables**>
 - Academia?
 - FIDE – Federations?
 - Schools and communities?
 - Everyone, including the governments??
- Gathering the Global Perspectives carefully<**Tangibles**>
 - Innovation in Education: What has it meant for us?
 - Innovators in Dialogue: What do they collectively inform?
 - Equity in Education: What value does it represent?
 - Emerging Intercultural Pathways: How Does it fit our context?

Global Innovation Exercise :In search for a “Contextual transfer”



- From an Academic Lens on looking into System’s effect as opposed to Single policy interventions is more sensible model for engaging with schools. [Reimers 2013] .
 - (1) Clear Identification of needs translated into a tractable problem.
 - (2) A thorough analysis of the context in which the problem exist.
 - (3) Taking stock of existing research on the determinants of the problem at hand and on the best practices to address it in other contexts.
 - (4) Analysis of gaps within extant research and the context,
 - (5) The design of innovation or transfer of practices to address the gap.
- Fact finding Mission: “**As-is of Education innovation**”, “Designs that seem to work”
 - Is it possible to establish at “Education As Is” to fit gaps with “Chess in Schools” ? (**unclear**)
 - Can we replicate Chess in Schools implementation? (As a Contextual Transfers exercise?)
 - Do we know “**What seems to be working in education**” (Find Good Candidate)
 - Do we know “**How Chess-in-Schools seems to work**” (Find Good Candidate)
 - Do we know, if all these are in global context? (**Scoping the Expansion ?**)

Deepening into Research Question?



- Further, we hope to push ourselves away from fundamental flaws in “claiming” no values that could potentially maximise global impact”.
- Or Are we limiting the key scenario of innovation in an access to global education through chess?
- Further, are we talking “Glocal” as Global reach or are we consolidating for a Global equity in education ?
- Or are we looking towards creating an innovation landscape for global education development?
- How is our cooperation going to be with other emerging innovation in education?

Questions to Ponder for Target audience



- Is the heritage of chess alone fully sufficient to start developing **novel programmes** to achieve “**an equity in global education**”?
(Q1: Is chess-in-schools a brilliant candidate for such intractable problems?)
- Or are we promoting a confirmation bias to increasingly prove how chess can become the confounding reason for the holistic development in children playing chess?
(Q2: Should we keep constantly Questioning the status quo for benefit of policy intervention?)
- We probe this tension in the innovator’s mind to reflect the value for chess in a global context of innovation from a lens of values they are strongly claiming in the innovating education

Where do we start this journey?



- **Dilemma of Heritage Trail Vs Heritage Trial?**
 - Define a “Chess-as-an-intervention” and run an effective randomised Control Trials for Evidence base (UK Trials)
 - A Random Exploration on “**Internalising the Grassroots intelligence inside Education as a Process**”? (Armenian and Indian Trials)
- **A Top-down Approach can only work?**
 - Bringing the Cultural Heritage in Key dialogues with Governments (**No denials**)
 - Establishing Political Will to engage for chess in schools (possible)
 - Diving into Pilots to find traceability to curriculum positions (tedious)
 - **Resolve the Dilemmas based on the key Context**
 - Finding Alignment to national Curriculum standards (**No Standards yet**)
 - Start to compete with other educational modalities for Capacity building
 - Finally, we are Discovering Education and Re-Inventing Chess?
- Settling the “**contextual transfer**” dispute
 - Global equity in Education: The Meaning Making
 - Building a strong shared curriculum capability



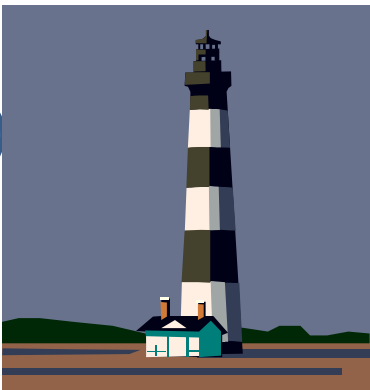
A Strong desire to Innovate?

Or is it a need of the hour?

Academic Disconnection with Chess?



Clearly there is a huge gap in the connections with the two islands



Agents for Chess in Schools

<As Is Position>



1. Confederation Access
2. Continental cooperation
3. Federation Access
4. System of Independent Associations
5. Independent clubs
6. Grassroots Context

Random Academic partnerships



1. Academic Trials
2. Inter-college Chess
3. Computer Programmes
4. Other laboratory projects

Agents for Innovator's Reach through Academic Reach

<As Is Position>



1. Building a Local Context,
2. Gathering a National context and international Context

What outcomes are we talking about?

<As Is Position>



Confederation
Access Regional
Context

World
Events

Commission
Events

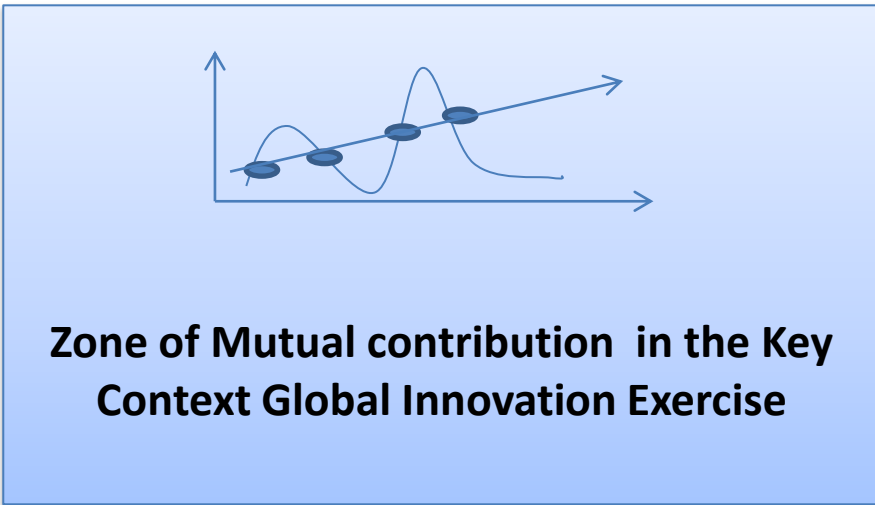
Federation
Events

Federation
Events



<Cooperating in Global Future of
education>

A desire of Global Innovation arena



Key direction:

- Is there a Global context in Education for Chess in Schools? And Why?
- Or Is there a clear sense of Disagreements among the Champions of change in education?

<As Is Position>



National and Local
Context

International
councils

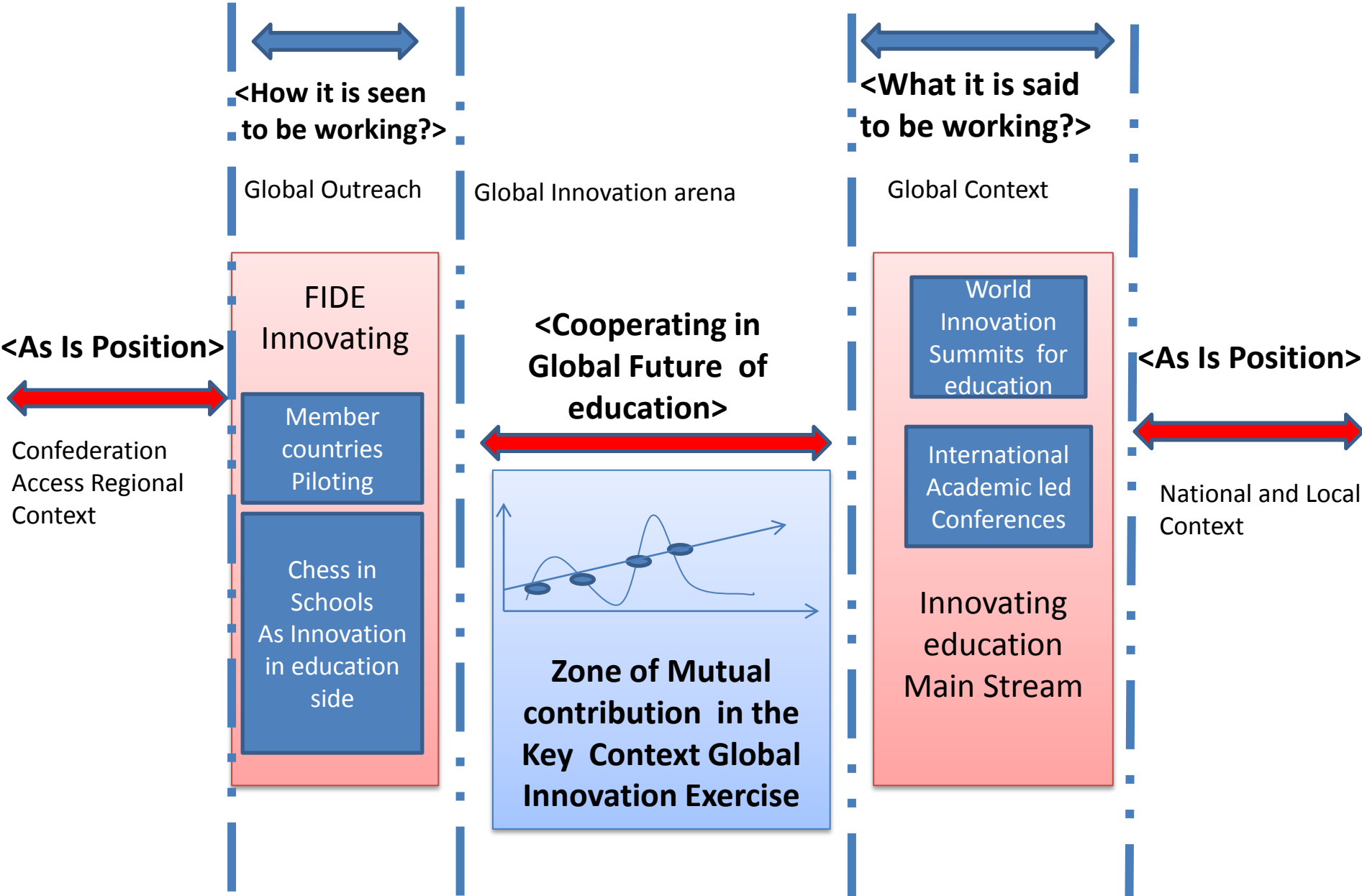
Education
Ministry Affairs

Curriculums

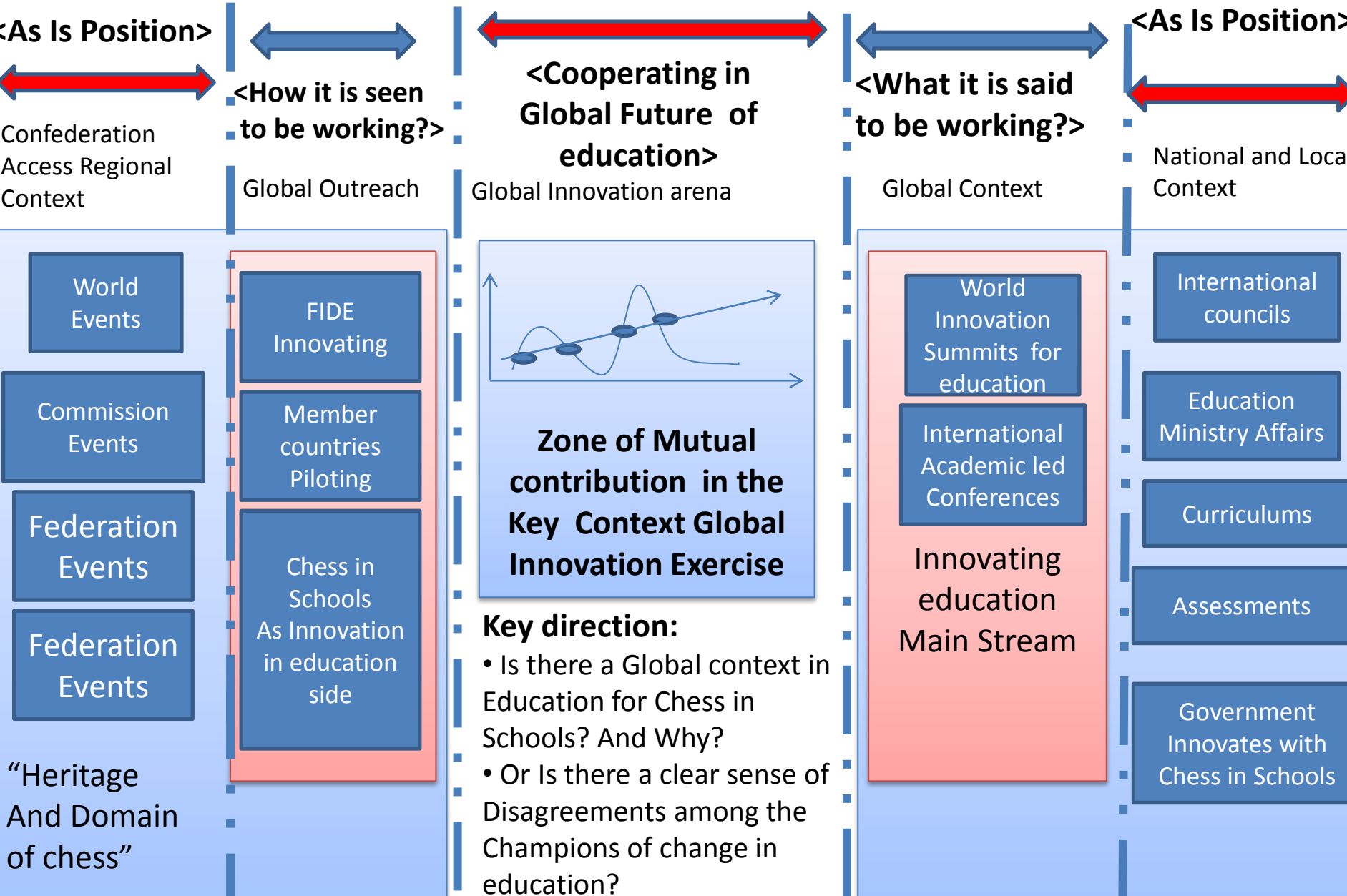
Assessments

Government
Innovates with
Chess in Schools

What Cooperation are we looking at?



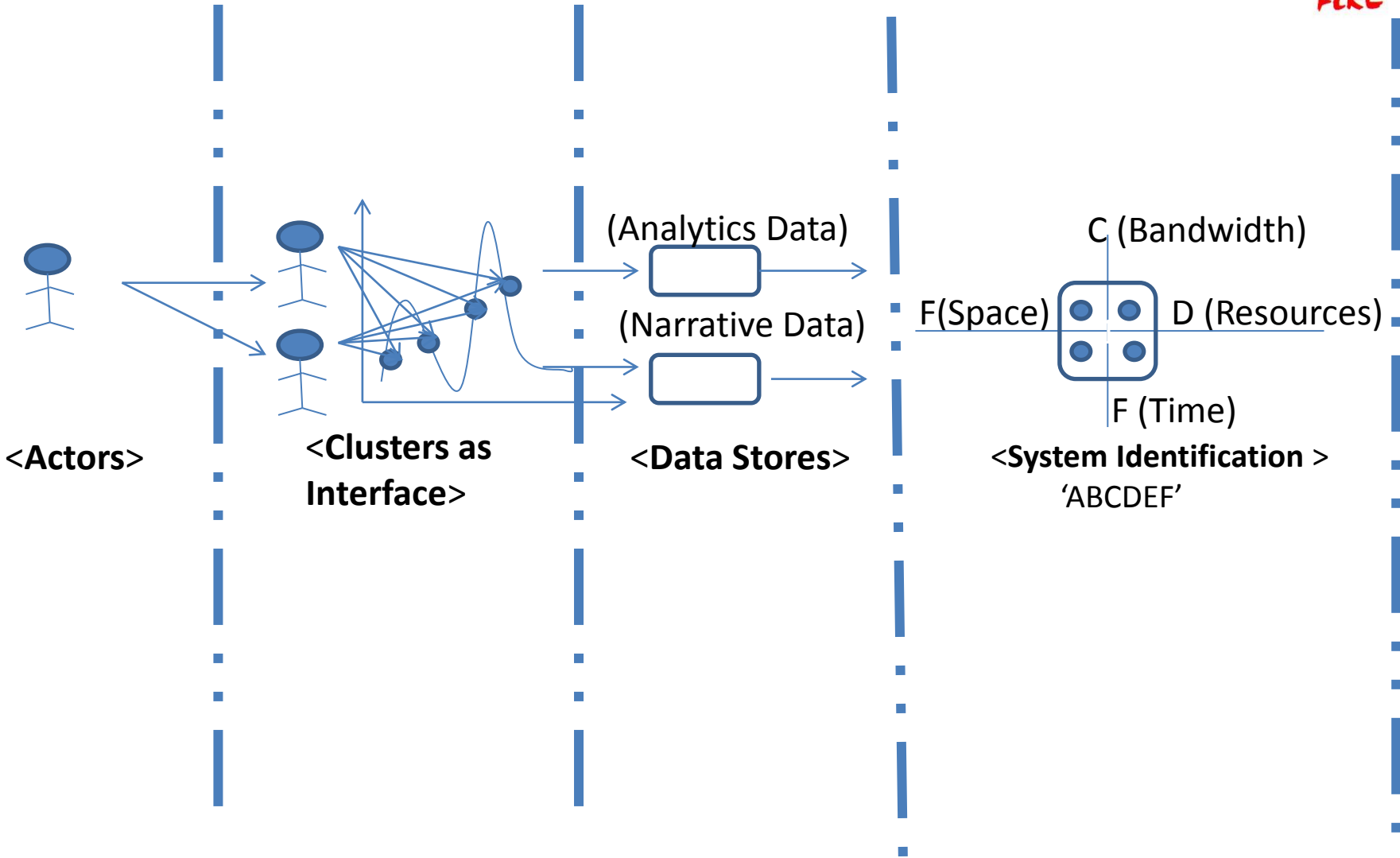
Consolidating into Single Perspective



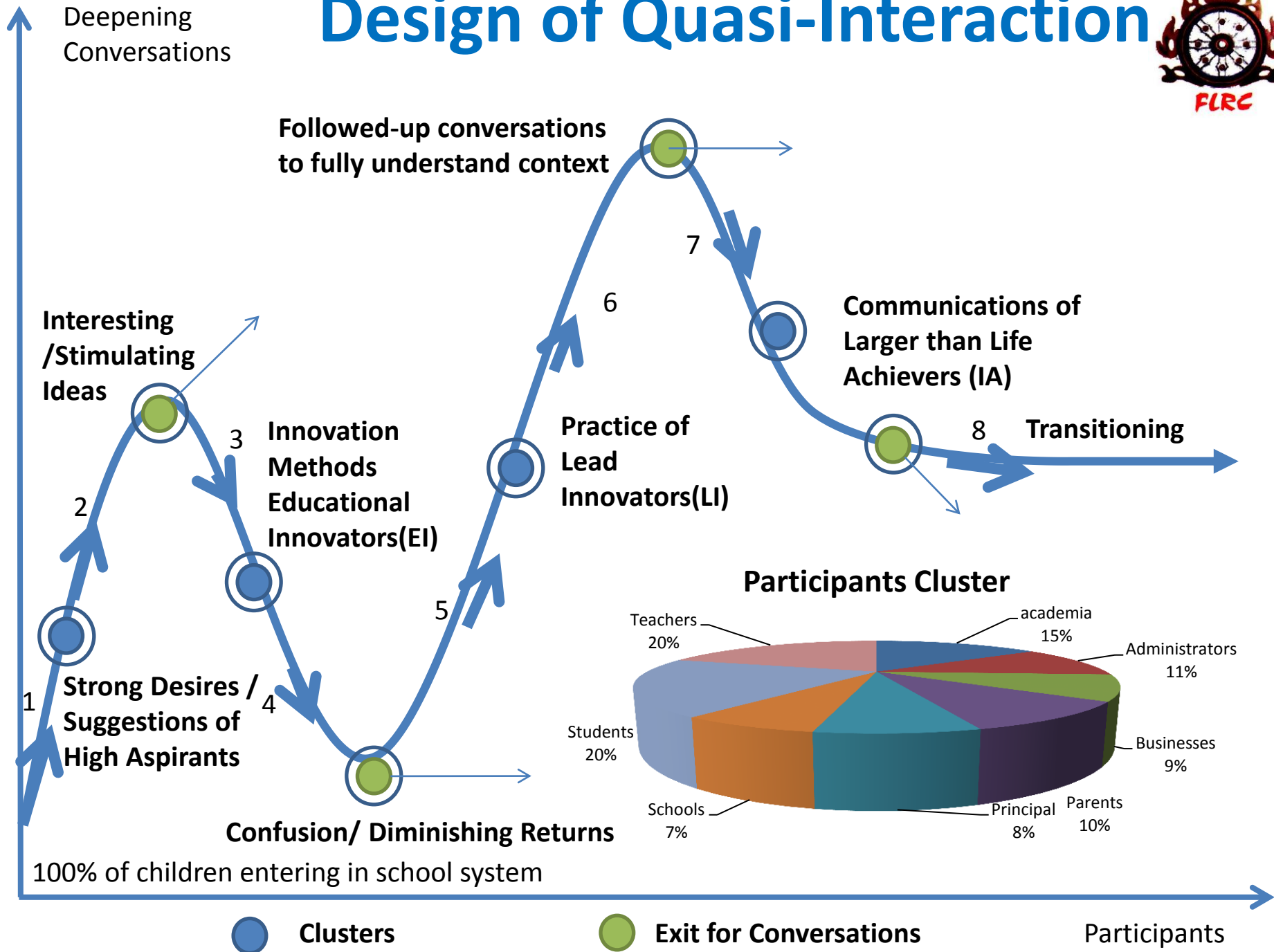


**Designing this Trial study trial to drive
an innovation?**

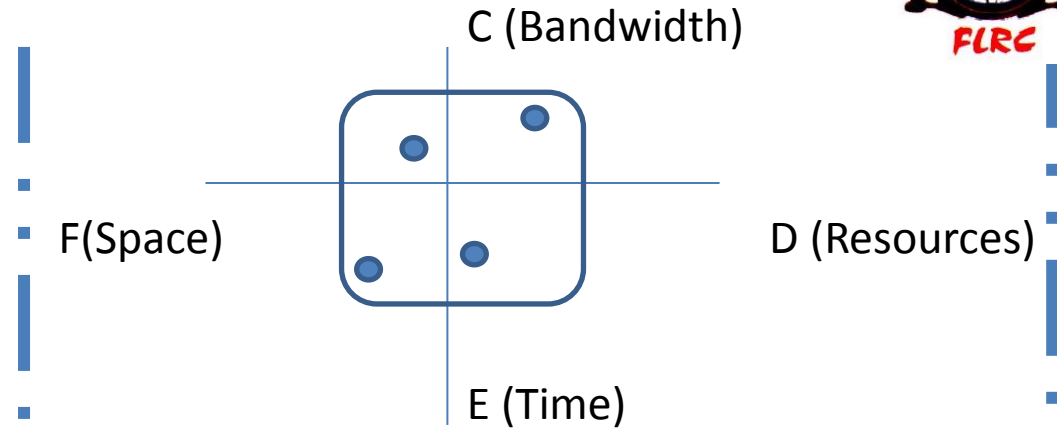
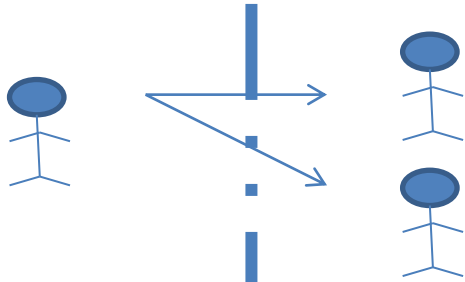
Quasi-Qualitative Study



Design of Quasi-Interaction



Quest for Quasi-Qualitative Data



(A) Introduced As
Principal of School
Advisor of Schools
Businesses
Administrators
Academia (university)
Parents
Teachers
Students

(B) "Discovered them As"
High Aspirants (HA)
Educational Innovators (EI)
Lead Innovators(LI)
Key accomplished in Education (IA)

(C) On going Context
Yes, we also see chess along side of our programmes
No, we have never heard anything like it

(D) Global Equity with Chess-in-Schools
Yes, nice bottom up possibility
No, simply goes not work

(E) Values Claimed
In the past
In the future
Futuristic
Not interested

(F) Values created
Local
National
International
Diminishing Returns

Conclusion of the First Fact Finding Mission



- The central question of **this exercise** is around the facilitation that what innovation in education means in strong favour for future of chess in schools dialogue, to scale up and address the context of global education innovation paradigm.
- (A) On one end we need to strengthen the system's orientation to drive strong value creation around innovation landscape in local education
- (B) On the other end, We need a value claiming in the global arena to strongly encourage the self-organisation of leaders (in global arena)
 - Facilitate a large scale integration of chess in schools programme across borders.
 - Allow an optimal socio-cultural capital regeneration
 - Motivate intercultural pathways through chess
 - Education a nation campaign to scale to Educate a Generation campaign
- We conclude that the chess-in-schools is a potential to be the “Least Common Multiple” of the core innovation exercise for education to scale the classroom opportunity to a global audience.



Key Result – Deriving the conclusion:

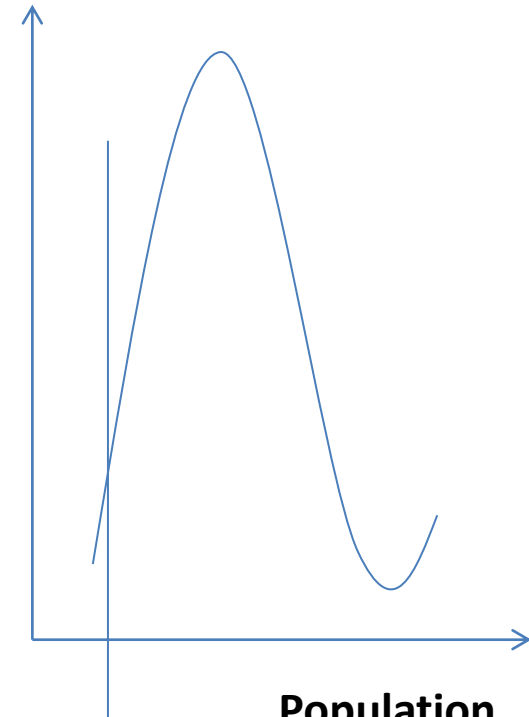
Table 7: Population believing Chess provides a Strong Equity, with no ongoing context

Ongoing Context for Chess	No
Equity	Yes
Value Claimed	In the future

Row Labels	Diminishing returns	International	Local	National	Grand Total
Education Innovator(EI)		1			1
Administrators		1			1
High-Aspirant(HA)				2	2
Principal				1	1
Teachers				1	1
Grand Achievers(IA)			1		1
Administrators			1		1
Lead Innovators(LI)	1		2		3
Academia	1		2		3
Grand Total	1	1	3	2	7

- There is an indicator for the strong signal of emergence, yet the adaptation is significantly lower.
- Importantly, the cultural communication makes sense in the “local” context.
- While the grassroots, value to the National context

CIS Acceptance

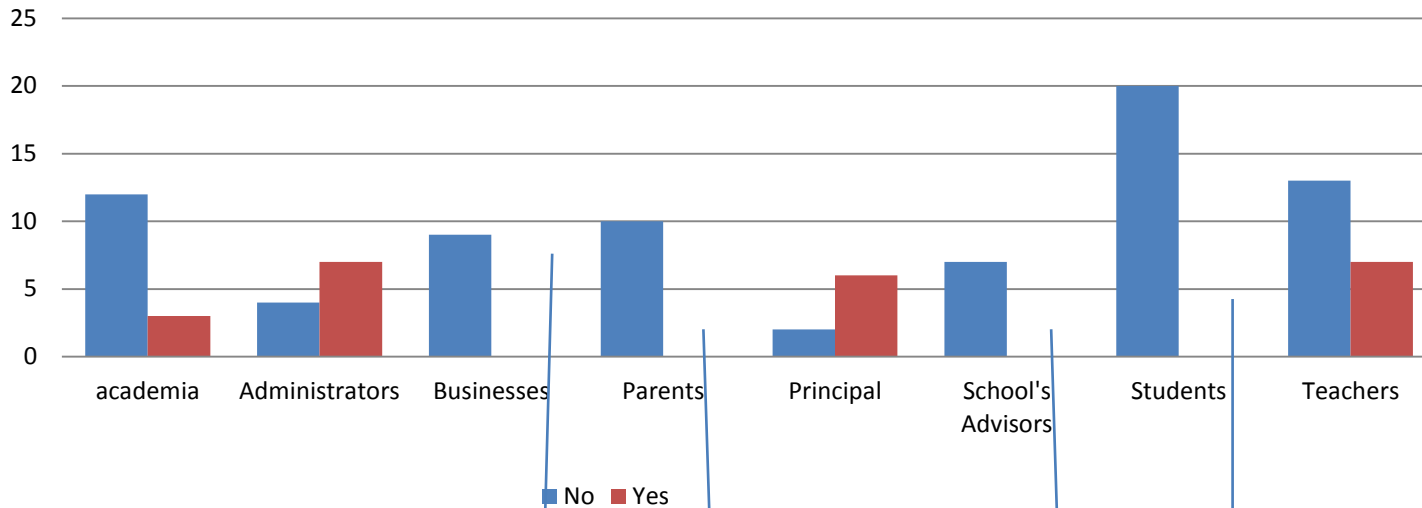


“Around 5% acceptance
Just breaking the
Innovation Diffusion
threshold”

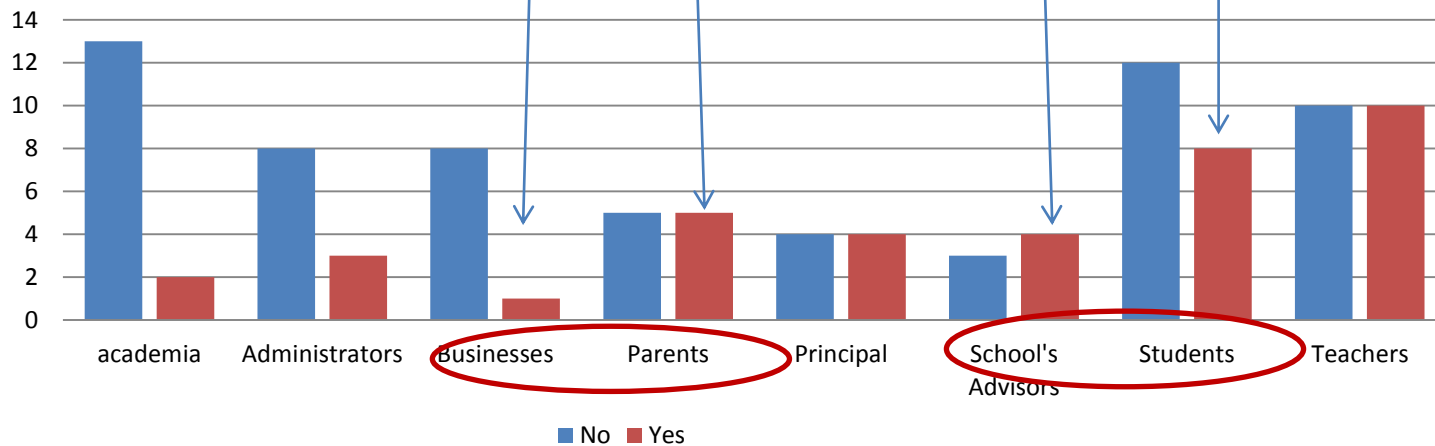
Global Context ?– not convincing for Innovators



Perspective of Global Equity in Education



Access to context of Chess



Reflection of Equity from the Perspective of Agents of change

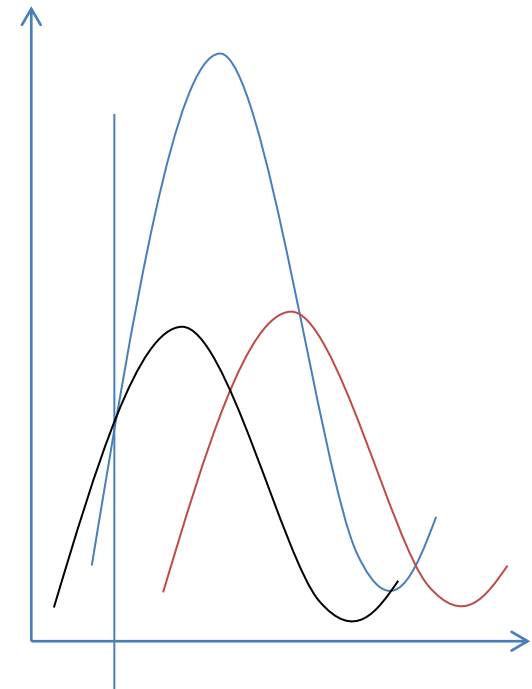


Row Labels	No	Yes	Grand Total
Education			
Innovator(EI)	14	4	18
In the future	2	2	4
From the past	3	1	4
Not concerned	9		9
On Going		1	1
High-Aspirants (HA)	53	12	65
In the future	23	6	29
From the past	5		5
Not concerned	18	4	22
On Going	7	2	9
Grand Achievers(IA)	3	3	3
In the future		1	1
Not concerned		2	2
Lead Innovators(LI)	10	4	14
In the future	5	3	8
From the past		1	1
Not Interested	5		5
Grand Total	77	23	100

GRASS ROOTS

INSTRUMENTS

CIS Acceptance



Population

“7% of the people higher up the value chain strongly believe future holds a strong option for chess.”

“high aspirant population are not focusing chess to bring a strong equity in global education.”

Population who have no access to context of chess in schools



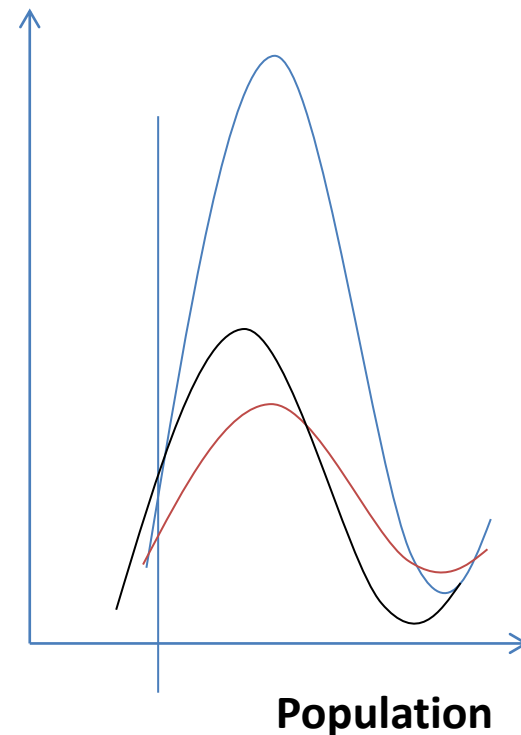
Ongoing Context for Chess No

Row Labels	No	Yes	Grand Total
Education Innovator(EI)	12	2	14
In the future	2	1	3
From the past	3	1	4
Not Concerned	7		7
High-Aspirants (HA)	29	3	32
In the future	12	2	14
Not Concerned	11	1	12
On Going	4		4
Grand Achievers(IA)		3	3
In the future		1	1
Not Concerned		2	2
Lead Innovators(LI)	10	4	14
In the future	5	3	8
From the past		1	1
Not Concerned	5		5
Grand Total	51	12	63

GRASS
ROOTS

INSTRUMENTS

CIS Acceptance



- The opinion changes about chess, higher up the value chain.
- While the grassroots, limit to the National context

“Chess has diffused to about 37%, yet in the absence of demonstrated leadership, we 17% acceptance, 12% higher up the value chain”

Population with strong context of chess in their region

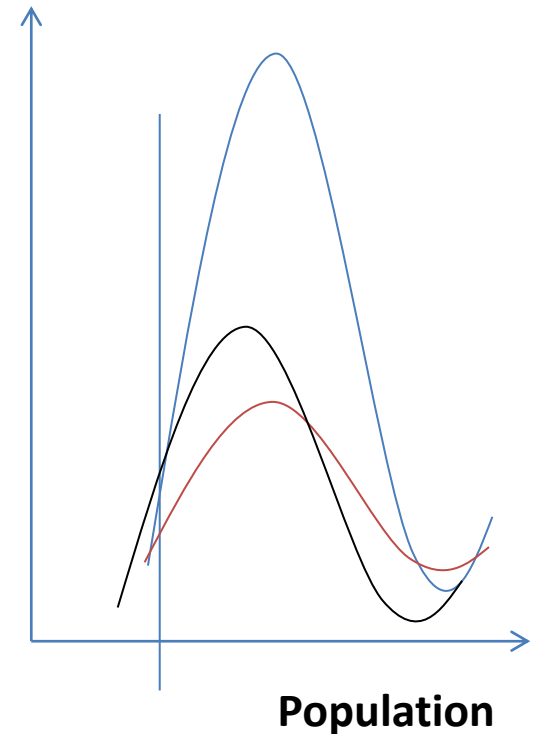


Row Labels	No	Yes	Grand Total
Ongoing Context for Chess	Yes		
Education Innovators (EI)	2	2	4
In the future		1	1
Not Concerned	2		2
On Going		1	1
High-Aspirants (HA)	24	9	33
In the future	11	4	15
From the past	3		3
Not Interested	7	3	10
On Going	3	2	5
Grand Total	26	11	37

GRASS ROOTS

- The opinions limited to grassroots, (strongly polarised)
- Equity is not seen as a major concern of grassroots
- Past Chess reference is marginalised

CIS Acceptance



“Belief in strong equity for education seems to be diminishing returns. Past reference is marginalised”

Scope for a more informed practice



- Innovation in Education – **What it means for us?**
 - FIDE (One family and One agenda in the Making)
 - Bringing key sustainability to our practice
 - Innovation addresses the priorities of addressing an Access for children’s Global future
 - Stronger way for integrating children into education mainstream
- Innovators in Dialogue – **What do they collectively imply?**
 - A future of co-operative dialogue to gather grassroots intelligence.
 - Leaders fail to claim a global value created for chess-in-school
 - An opportunity to collaborate on Global scale
 - Clear indication of missed heritage driven dialogue
- Equity in Education – **What does it mean?**
 - Common Resource Pool of Smart thinkers
 - Social Imagination of Chess, Extending the Greek Gift!
 - Ready access without the fear to indulge
 - A framework to build empathy quality among children
- Emerging Intercultural Pathways – **How Does it fit our context of development?**
 - Bring the Open culture (transforming conflicts as we forge ahead)
 - Bringer wider cultural access and gathering tolerance



Discussion: Consolidating the observation

Surprises

- Global Innovation Perspective
 - Group average seem to be higher for chess, indicating strong desire among early careers
 - Expectation of global context seems more futuristic
 - What is working is what is ignored for knock on effects across disparate educational tools.
- Global Equity dialogue
 - Global equity applied to local context is promising
 - Gaps in motivating global values for chess more among grassroots
 - Context of Chess is critical in determining “what works as innovation on chess front”

Conflict of Interest

- Global Innovation Perspective
 - Perspective of Global innovation seems to discouraged
 - Values seems to be more on champions of change
 - Ignoring a “Me too” dilemma for chess in schools
- Global Equity Dialogue
 - Strongly chess is not believed to bring a global equity in education
 - This is consistent across Educational innovators, Businesses, parents and students
 - Systemic Error or are they commonly influenced? Missing links
 - Even Unprecedented success still confined to chess-community



Communicating the Refinements on a Global Education Scenario with Chess in Schools?

An email to First Lady, Michelle Obama



- Subject: Attn: First Lady, Michelle Obama " Math and Chess for America's Children"
Date: Tue, 27 Jan 2009 14:23:19 -0600

Dear First Lady Michelle Obama,

-
- As a parent of two beautiful young ladies, I believe that you more than any First Lady in our nation's history recognize the importance education plays not only in the future of our children but in our nation as well. I would like to share this information with you about a program now in use in Canada and solicit your advocacy and direction in pursuit of implementation in our schools.
-

- Please forgive the length of the information enclosed. Our children's education is simply too important for brevity.
- If I may be of further assistance my contact information is attached.

Thank You,

Rob Mitchell

3450 Northboro Ct

Murfreesboro, TN 37129

robmtchl@bellsouth.net

**No We need not sell the fear to Chess Parents,
Education System. However, we need to present
in a global forum**

Math and Chess for America's Schools

- Education is one of the single largest state budgetary expenditures. Educating our children and providing them with the necessary tools to become productive citizens is a moral and legal duty of parents and governmental entities. Yet even with the increased focus we place on education our students still fall below national norms in math scores.
- There is an efficient and innovative way to teach our students mathematics. That is by integrating math with the game of chess.
- Chess has long been considered a way for children to increase their mental prowess, concentration, memory, and analytical skills. To anyone who has known the game, it comes as no surprise that these assumptions were actually proven in several studies on how chess can improve the grades of students. Although chess has been shown to increase the mental abilities of persons of all ages, the main studies have been done with children. This is first for the obvious reason that students are constantly tested anyway, and therefore the data need only be analyzed, and secondly because children's mental development is more rapid and can be more easily measured than persons at a later life stage.
- <<Same Contexts >



A letter to President Bush!

On Chess in schools

- **Subject: Creative and Effective Curriculum for Improving Math and Science Education**

To: President George Bush

February 22, 2006

Math and Chess for America's Schools Education is one of the single largest state budgetary expenditures. Educating our children and providing them with the necessary tools to become productive citizens is a moral and legal duty of parents and governmental entities. Our nations future depends upon our next generation's ability to remain globally competitive in the fields of math and science. Yet even with the increased focus we place on education our students still fall below national norms in math scores.

There is an efficient and innovative way to teach our students mathematics. That is by integrating math with the game of chess. Chess has long been considered a way for children to increase their mental prowess, concentration, memory, and analytical skills. To anyone who has known the game, it comes as no surprise that these assumptions were actually proven in several studies on how chess can improve the grades of students.

Although chess has been shown to increase the mental abilities of persons of all ages, the main studies have been done with children. This is first for the obvious reason that students are constantly tested anyway, and therefore the data need only be analyzed, and secondly because children's mental development is more rapid and can be more easily measured than persons at a later life stage.

- << Interesting Research Details>> **Let's Choose to mediate an effective systems!**

- I am currently in discussions with Senator Lamar Alexander's office of Tennessee and the Tennessee Department of Education regarding just such a program. I look forward to sharing this information with you as well.

Sincerely,
Rob Mitchell
615-885-1044
robmtchl@bellsouth.net

Murfreesboro , TN

Securing the Future Direction



- How should we act now
 - Negotiate globally for access to global education for children for inclusivity.
 - Clarify “what is missing links in chess-in-schools”
 - Look into specific contextual transfers across the teaching and learning practice
 - Maintain the intangible heritage of chess, as non-negotiable education tool
 - Identify methods to generate produce and consume children’s data to enrich experiential learning with chess.
- And why
 - Resources for education is scanty, we must converse our expansion in a sustainable way to effectively reuse and recycle “the co-creation of knowledge”.
 - Chess is lean and equitable and fosters, imaginative, inclusive, integrative thinking of a Global citizen
 - Maximise the communication in the global context of bringing equity in education by strengthening the overall educational output and to

Continuing Dialogues

- Extension of the Study:
 - Moving from Quasi to a full blown random trial
 - Revisiting the cycle with key target groups
 - Federations, governments, Charities, Social Entrepreneurs, Sponsoring businesses
 - Mainstream Monitoring and Evaluations
 - Promote Quantitative studies
 - Identify methods to integrate meaningful chess data, which can be effectively recycled, for a more effective quantitative studies.

Acknowledgments



Academia

- Prof. Josa Lambert, University of Luven, on motivating key cultural context to be exercised with Chess, and confirming University roles in monitoring such access. (**September 2013**, where this work began)
- Dr. Fernand Gobet and Dr. Steven Higgins for their individual appointments to set the first brain-storming discussion. (**October 2013**)
- Dr. Massimo Amadio, Programme Specialist and Ms. Ruth Creamer Documentations of UNESCO IBE for crucial brain-storming chess on challenges from Sports on curriculum integration. (**April 2014**)
- Dr. Guido Bugmann, Plymouth University on facilitating goals on running qualitative studies involving free-text analysis. (**June 2015**)
- Dr. Reimers Fernando inspiring the framework of applying innovation to intractable problems. (**Dec 2013**)
- Dr. Mark Nowacki, Singapore Management University on facilitating how Experiential learning works with games. (**Dec 2013**)

WISE and Conferences (Oct 28, 29, 30, 2013)

- Generous interviews by WISE-Laureates during the Event to motivate context beyond their interest and expertise.
- We thank the every interesting personalities who shared key insights into their rationale for “why and why not chess in schools” at 5 international events.
- WISE Team for providing an Accreditation to attend the Summit.

FIDE:

- FIDE for enabling the World Innovation Summit for Education (WISE) visit and World Championship visit, which helped to access key people who deliver global change in education.
- I would fail in my duties if I don't thank Mr. Kevin O Connell and Mr. Ali Nihat Yazici, (present and past FIDE CIS chairman) for making this happen.

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Thank You!!