

21st Century skills integration - some challenges and solutions

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IATEFL 2019

“This asks more questions than it answers ..”

2

*That's a good thing
isn't it?*

Oh, and about the pictures ...

3

*“A woman must have money
and a room of her own if she
is to write”*

Overview

4

21st Century skills - a quick reminder.

Issue 1 Assessment.

Issue 2 Cultural, Political and Educational Challenges.

21st Century skills - a framework

5

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Issue 1 Assessment

6



Assessment of 21st Century skills - the backdrop

7

Should we assess 21st Century skills as part of our ELT assessment at all? After all it's often part of what we teach.

Should we assess 21st Century skills separately from the language or integrated with it?

Globally, assessing 21st Century skills is not unusual, including in the UK.

Spreadsheets - Test - KS3 ICT - Bi

www.bbc.com/bitesize/guides/zdydmp3/test

st direct National Rail - The ... Facebook | Welcom... Cheap Flights - Dea... YouTube - Broadcas... Home - Dropbox Dashboard < wadin... Green Bottle Tree

KS3

Spreadsheets

Spreadsheets are used to store information and data. Once we have our information in a spreadsheet we can run powerful calculations, make graphs and charts and analyse patterns.

Part of [ICT](#) | [Software](#)

+ Add to My Bitesize

Revise **Test**

Spreadsheets

1 Which of the following is NOT capable of producing a spreadsheet?

- ☐ Open Office Calc
- ☐ Microsoft Office Excel
- ☐ Microsoft Office Word

2 What word is used to describe re-organising the order of

More Guides

- [Managing information on computers](#) >
- [Presenting information on computers](#) >
- [Software applications](#) >

Spreadsheets



These are
right/wrong
answers.

So, what are the arguments for and against?

9



Yes to assessment 1

10

Assessment

adds value and credibility to the whole
area of 21st Century skills

and

makes the subject 'serious' in student
eyes.

Yes to assessment 2

11

Formative assessment can allow teachers to develop group and individualised learning strategies.

Yes to assessment 3

12

Summative assessment motivates students, important in more exam-driven educational cultures perhaps.

No to assessment 1

13

Some of the success measures in 21st Century skills are linked to personality or that might be called emotional intelligence.

Do we, as language teachers, have the tools to assess these in a meaningful way?

Public 'performance' ability , self-confidence and leadership are examples. They are not necessarily language-linked, or at least L2-linked.

No to assessment 2

14

The issues around assessment are also complicated by the distinction between 21st Century skills activities that are language-specific or language-dependent and those that are free-standing.

For example, a student with a low level of spoken English can be the most collaborative member of a working group, employing gesture, demonstration and a positive attitude.

A thought

15

As 21st Century skills mastery - in some cases with a strong focus on public performance - becomes closely linked to success in English classes, there are serious risks of feeling left behind or somehow excluded for the more reticent students.

No to assessment 3

16

If we assess students' 21st Century skills abilities using benchmarks against students from different learning cultures, we need to remember that skills transferability from home environments will often influence 21st Century skills outcomes.

No to assessment 4

17

As Irenka Suto (2013) says “ If a 21st Century skill can be quantified, then measurements of it (that is, assessments and qualifications) can be utilised in application processes for jobs and university places, thereby making them more meritocratic.”

If

Some skills cannot be measured easily in quantitative terms, for example, collaboration or innovation can be so subjective.

What *can* we assess then?

18



What can we assess?

19

Two things

- the thinking process
- the result itself, but often there is no 'correct answer'.

'Show your workings'. The process really matters.

Some context about process

20

“But what about a skill like collaboration? The Common Core does have a standard where students “participate in collaborative discussions,” and this is across all grade levels. However, collaboration is more than just discussions; it’s about creating together, coming to consensus and other quality indicators.”

Andrew Miller (2013).

Methods of assessment - can be combined

21

Self-assessment - with or without structured questions - or perhaps with structured questions and open statements. Self-assessment is often one-sided but what is not said or is under-emphasised can often reveal areas needing support.

Methods of assessment - can be combined

22

Multiple-choice standardised assessment - but simple multiple choice may not be effective way to measure the process. But multiple choice plus a justification question might be effective.

Methods of assessment - can be combined

23

Peer-assessment and description of processes. Group dynamic and the character of group members need to be somehow factored in.

‘Live’ describing of tasks and processes. Emily Lai and Michaela Viering (2012) propose “One common approach used in the metacognition research is to employ verbal protocols or ‘think alouds’, where examinees reflect out loud on their performance as they engage with a task.”

Methods of assessment - can be combined

24

Teacher observation integrated with 'language observation' or without it. The effective completion of a 21st Century skill task may be both process and language-driven.

Example - Assessment of problem-solving in groups 1

25

“While we looked at the problem of how to stop people using mobile phones when driving, we summarised proposed discussed compared agreed revised presented”

Teacher intervention *“why didn’t you, but don’t you think, maybe you should have ...”*

Assessment of problem-solving in groups 2

26

The processes expected to be used in problem-solving can be quantified to some extent.

This can lead to a checklist for teacher observation of groups - but with logistical limitations as in wider ELT classes.

Observation of processes allows us to understand how individual students operate in a given group dynamic.

Assessment of students identifying bias in a text

27

Activity 3. Award marks for the numbers of examples of bias identified. Done on an individual basis.

Activity 4. Observe the activity – best performed in small groups. Note down comments around the quality of the arguments made for and against, the extent that all students were involved in the discussions and the way students worked together to reach agreement. Use these comments as formative data to feed into a class-wide discussion about team work and critical thinking after the activity.

Adapted from 21 Century Skills in ELT - A Guide for Teachers - Garnet Education, 2019

Assessment using student description of processes

28

Activity 2.

Put students into groups of five. Three are active participants and one is an observer and describer and one is writer. The observer and describer gives the writer an ongoing description of the approach and process taken by the group. The teacher compares the written descriptions at class level and leads a discussion of the different approaches, using the descriptions as formative information to guide future lessons.

Issue 2 Cultural, Political and Educational Challenges

29



Cultural, Political and Educational Challenges

30

Cultural issues have two aspects

issues of national culture and politics

issues of local learning traditions and cultures.

National culture and politics

31

Our cultures are close to our hearts - we easily offend and take offence.

National culture is often intertwined with national politics.

Both can make an impact on 21st Century skills in education.

Skills areas in particular focus

32

Critical Thinking

Information, Media and Technology
Skills

Citizenship and Global Issues

Critical Thinking

33

Critical thinking - challenging the status quo?

Integration of critical thinking into ELT is certainly achievable but critical thinking may not be the norm in a given culture.

Experience suggests that the problem is less one of resistance to the idea of critical thinking in itself and more a lack of experience and knowledge of it on the part of teachers and institutions.

Information, Media and Technology Skills

34

Information, Media and Technology Skills can also create challenges in certain locations.

Potential issues include

internet censorship, online privacy, discussion of media ownership, bias and transparency, the 'fake news' challenge and the handling of information that might be seen as challenging official policies.

Citizenship

35

Citizenship in ELT classes is an aspect of 21st Century skills that includes global issues, perhaps one of the most complex areas for teachers to manage.

Global issues cover a wide range of topics and some such as human rights, gender and sexuality issues and religious freedoms can be highly controversial in certain locations.

Some ideas

36



The choice of topic

37

Local knowledge and understanding.
Stakeholder engagement.
PD (of course).

Neutral topics.
What is neutrality?
Neutral can be dull and not motivate.

Global to Local

38

Abstract or broad topics are perhaps the easiest way to deal with some of the problems suggested, or

choose topics that are very local or very global with little national political connection.

For example, the topic of a local campaign about improving public transport is probably not particularly controversial, but will have a strong connection for the students. Equally something very global and potentially controversial, yet unlikely to be misinterpreted in any way in terms of national culture or politics, can also attract their interest.

Topics that engage

39

We need to consider ways that we can make the students develop an affective or emotional engagement with the material.

Local topics will generally be very successful because the students feel engaged with them. Thus authenticity, realism and a connection to 'me' are very important.

21st Century skills work can be quite learner-led, students can choose areas to discuss.

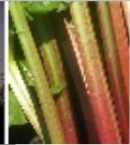
Example - global and local

40

Carbon footprint calculator

Not secure | www.carbonindependent.org

Bookmarks | Gmail | fd first direct | Home | LinkedIn | National Rail - The G | Facebook | Welcome | Cheap Flights - Deals | Other bookmarks



CO2 calculator

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Carbon Footprint Calculator

Complete this questionnaire to estimate / calculate your CO2 emissions.

Do either a quick estimation (no bills needed) or a more accurate calculation of the CO2 and other greenhouse gas emissions that you are responsible for, as an individual, over a 12 month period.

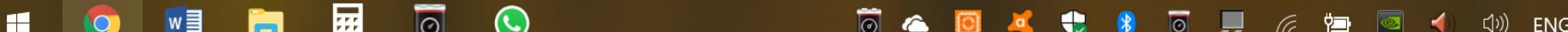
In section 1, you enter household data, so that items such as household heating and car use are shared between the members of your household.

In section 2, you enter personal lifestyle and travel choices that apply to you as an individual.

Updated December 2013 to include coal, wood, bottled gas, and newer "green" electricity tariffs.
[Read more.](#)

Section 1 (household)	
q1.	How many people are there in your household? Update

Notes:
This is needed for sharing out your gas, electricity and car use between the members of your household.



11:15

Local educational cultures 1

41

Some learning traditions and educational policies can seem to be the antitheses of the skills sets we are seeking to develop.

For example in educational cultures built around memorisation and a strong focus on 'teaching to the test', students will tend to answer critical thinking questions with memorised text that they hope will appear in the examination, rather than apply critical thinking approaches.

Local educational cultures 2

42

Public performance, sense of face, modesty.

Perception of teacher roles - teacher-centric - lecture style .

Regular testing.

‘Challenging’ the teacher.

Solution

43

The short-term approach to managing some of these possible challenges to delivering 21st Century skills will be around teacher and academic manager education.

Successful implementation of 21st Century skills work will, after all, depend to a great extent upon managerial 'buy in'.

References

44

- Irenka Suto. *21st Century skills: Ancient, ubiquitous, enigmatic?* Cambridge Assessment 2013
- Andrew Miller. *Let's Truly Assess 21st Century Skills!* Huffington Post March 2013.
- Emily Lai and Michaela Viering. *Assessing 21st Century Skills: Integrating Research Findings*. National Council on Measurement in Education, Vancouver, B.C., 2012.
- Christopher Graham (editor). *21st Century Skills in ELT - A Guide for Teachers*. Garnet Education, 2019.

Thank you

www.garneteducation.com

The book

