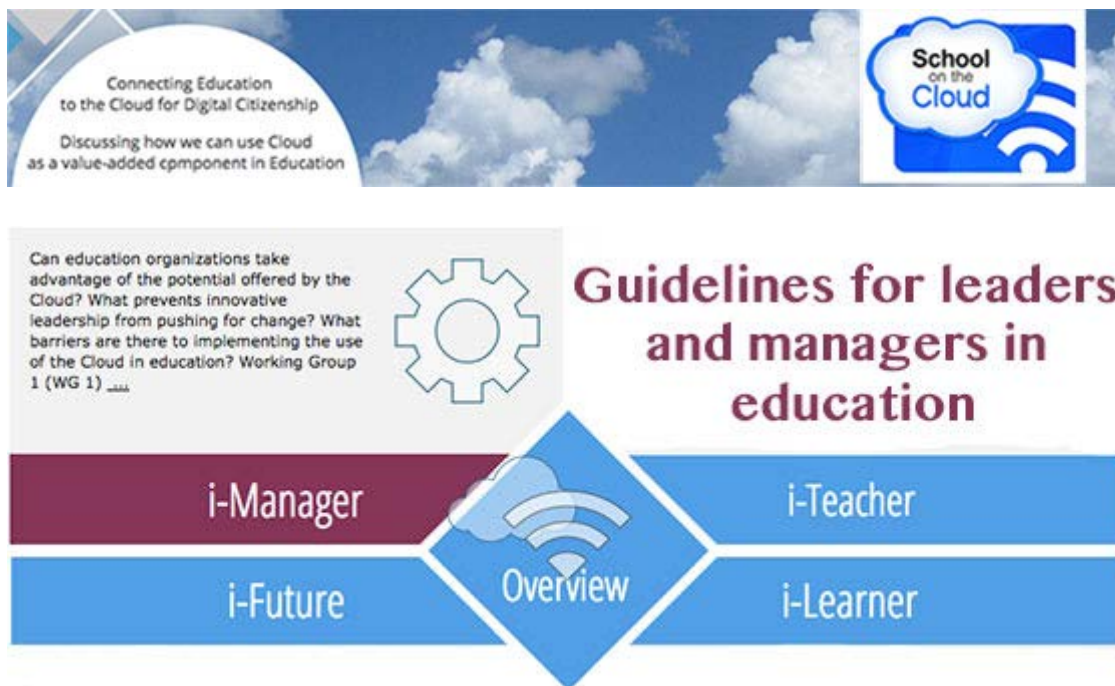


Guidelines from the [School on the Cloud Project](#)



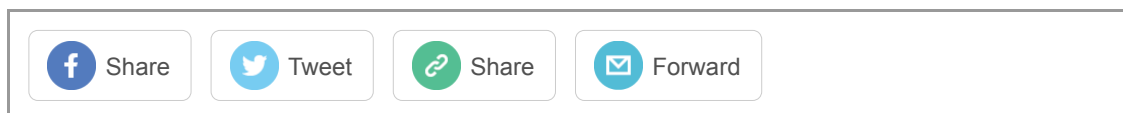
The Cloud In Education

Guidelines: recommendations

The School on the Cloud Project makes 4 recommendations to education leaders and managers. These are:

1. [create a digital strategy](#) - 2. [Build digital capabilities](#)
3. [Establish pathways for success](#) - 4. [Keep an eye on the future](#)

[Return to the guidelines](#)



Developing a digital strategy

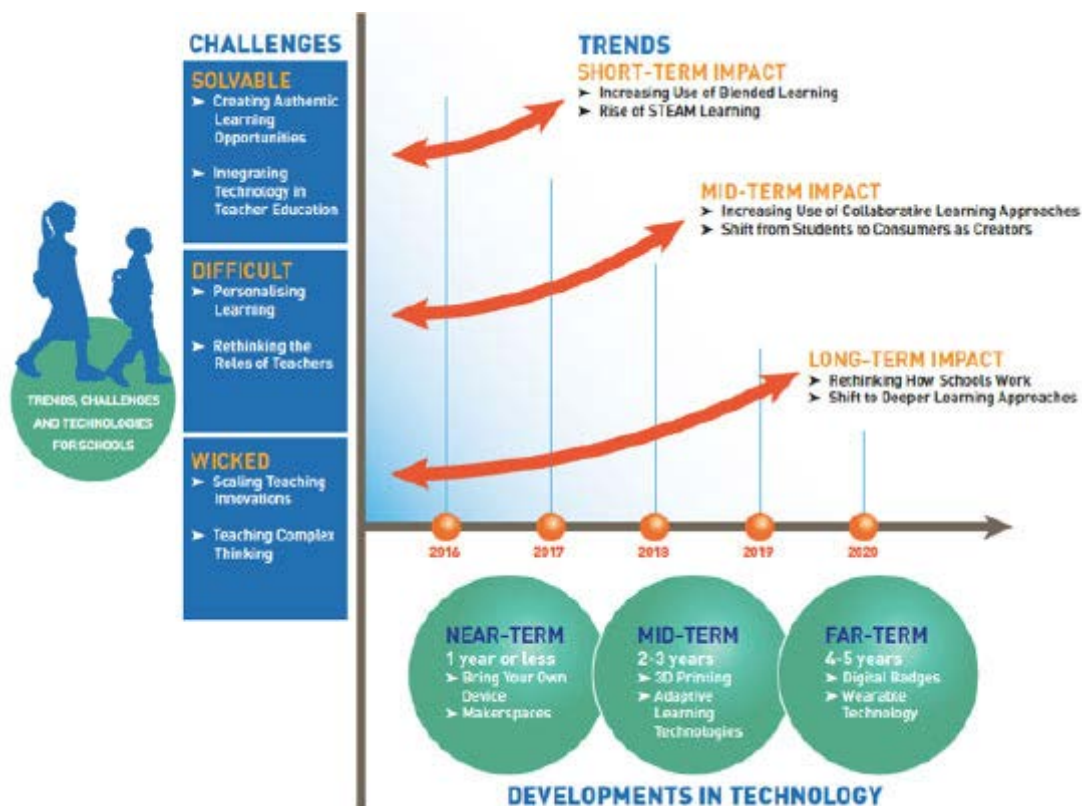
Leaders need to create and implement a digital strategy to help exploit the potential of the Cloud and meet the demands of their students, teachers and administrative staff. The Cloud provides huge opportunities to increase access to education for

universities and schools.

A digital strategy is a vision for the future of digital in your education organisation. It relates to rising expectations and demands from students, staff and parents for an integrated and streamlined IT experience.

The strategy can seek to make the use of IT much smoother and more cost-efficient. It can also offer enhanced, state of the art learning experiences, leading to better attainment and improved retention rates.

The [Irish Digital Strategy for Schools](#) is an interesting example that seeks to promote the use of the Cloud in education. It offers a process to embed technology and digital learning tools into all schools. As a national Action Plan, it develops a vision of developments in technology and ways to overcome the resulting challenges.



The Irish school strategy address 4 key themes:

- Theme 1: Teaching, Learning and Assessment Using ICT
- Theme 2: Teacher Professional Learning
- Theme 3: Leadership, Research and Policy
- Theme 4: ICT Infrastructure

These are underpinned by 5 core principles:

1. A Constructivist Pedagogical Orientation underpinning the embedding of ICT in schools
2. The use of ICT in teaching, learning and assessment can enhance the learning experiences of all students.
3. The use of ICT in teaching, learning and assessment is embedded in school curricula, Department policies and teacher education

4. ICT is used in an ethical and responsible way.
5. ICT Planning is required to ensure ICT integration in teaching, learning and Assessment.

Other strategies can also be reviewed: [Scotland](#), [Queensland](#), [New Zealand](#)

School / university strategies: [Horizon 2020](#), [Surbiton](#), [Leeds](#),

A School Digital Strategy

SHS Junior Schools Digital Strategy



SHS Junior Schools Digital Strategy <https://youtu.be/1MphXBlueO0>

Blog: [Questions you need to ask when developing a digital strategy](#)

Blog: [Learning with E's](#)

Higher education digital strategy (G. Raymond Chang School of Continuing Education, Ryerson University, Canada)

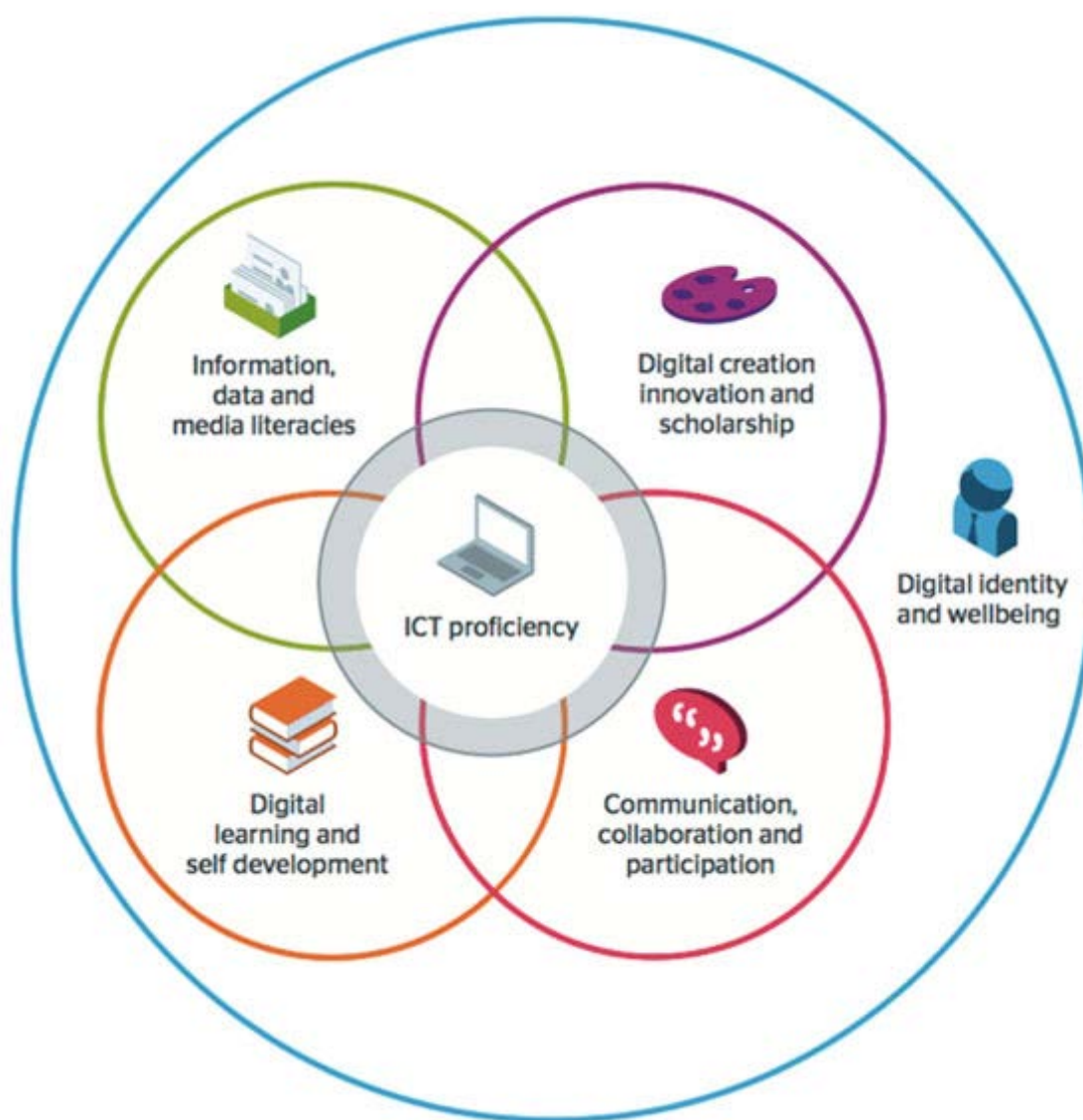
DES - Digital Education Strategies



Digital Capabilities

Digital capability is described by Jisc as a framework which describes the skills needed by staff in a wide range of academic, administrative and professional roles to thrive in a digital environment.

Jisc digital capability <https://www.jisc.ac.uk/rd/projects/building-digital-capability>



Jisc has produced a framework for educators as part of its Digital Leadership Programme. See details in the presentation.



Jisc

22/04/2016

Digital capability service

Sarah Davies, Jisc @sarahjendavies

1 of 14

They have defined [six elements of Digital Capability](#).

In schools students can be the driver to develop capability among teaching staff.

Canberra Public Schools - 'Learn, Anywhere'



Canberra Public Schools - 'Learn, Anywhere' <https://youtu.be/bcQ1qXaWgYU>

Other links

[Digital Capability Toolset](#)

[Digital Capabilities and Digital Well-being](#)

[Example learner profile](#)

[Jisc digital capability codesign challenge](#)

Transition pathways

Cloud Computing is a tool, not a strategy. Implementing it in your organisation means you need to get ready, leaders/managers must manage any fears and control risk. The entire organisation does not need to be migrated into the Cloud immediately, it should be planned in stages.

In planning a pathway to moving to the Cloud leaders should assess how Cloud Computing can fit into the overall IT strategy for their organisation and support its mission and overall strategy. Following a six-step process is recommended.



Step One: Learning About The Cloud

Your strategy starts with learning about [what the Cloud can do](#) for your organisation and [the challenges](#) that might be faced.

Step Two: Complete An Organisational Assessment

Managers should conduct an assessment of present and near-future IT needs, in terms of the structure and capacity and what is the IT baseline. This should identify what resources are needed all the time and are necessary for day-to-day operations. Then a review of any seasonal, cyclical, or event-based demand for computing resources should be completed.

Some questions to consider are:

- What sensitive data needs to remain private and protected?
- What level of protection is required?
- Who needs access to the data?
- What laws and jurisdiction that govern information apply to their organisation and are they likely to change over time?

Step Three: Cloud Pilot

Leaders and managers should then pick one area or one project to pilot the Cloud and assess its outcomes. The successes and issues should be shared in terms of “best practices” and “lessons learned”.

Step Four: Cloud-Readiness Assessment

Based on the outcomes of the pilot, IT managers should then conduct an overall IT Cloud-readiness assessment to determine which data and applications can be moved to a Cloud environment and ranked in order of importance.

A decision on the type of Cloud (public, private or hybrid) suitable or usable for these purposes. This confirms which data and applications can - and cannot - be housed in a Cloud environment.

Be sure to look for a solution that allows the Cloud system to be configured with the appropriate data protection protocols that overcome where the data is stored and security obstacles.

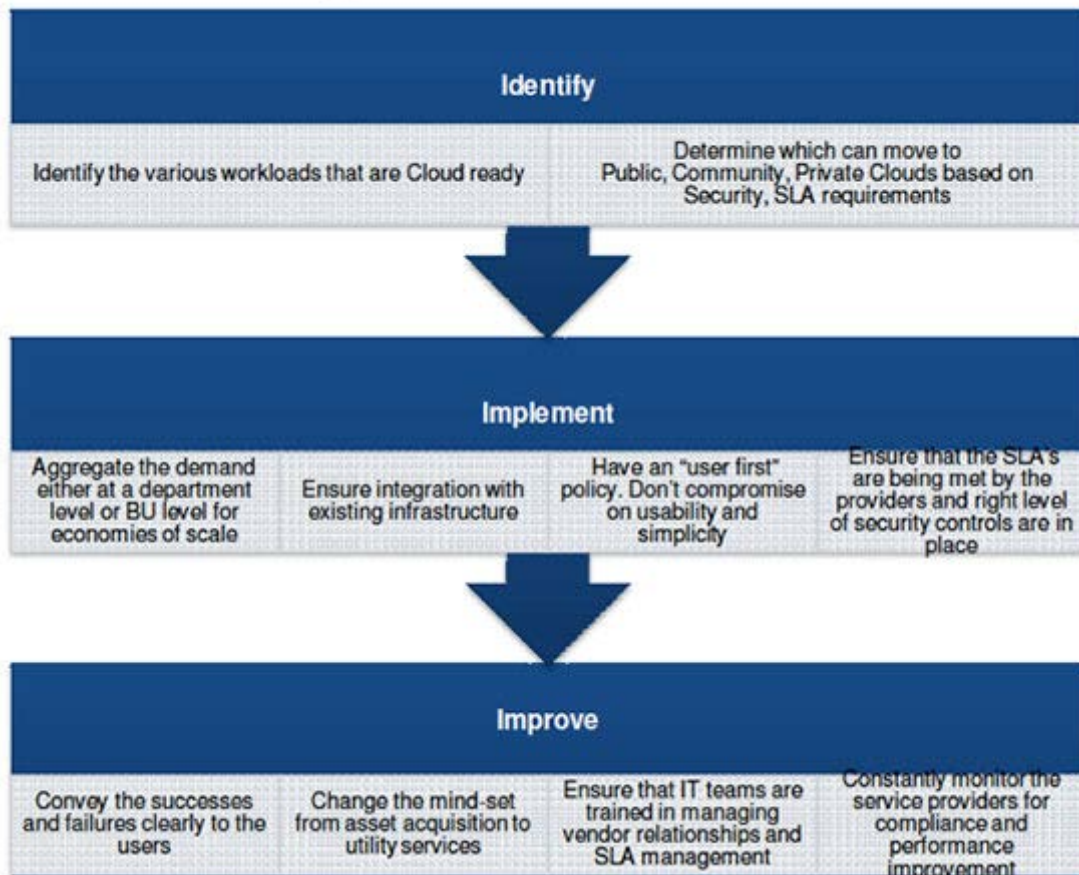
Step Five: Rollout Cloud Strategy

The Cloud Computing implementation is where the Cloud goes from being a test effort to being more mainstream in terms of data management, its use and operations. The Cloud becomes part of regular operations.

Step Six: Continuous Cloud Improvement

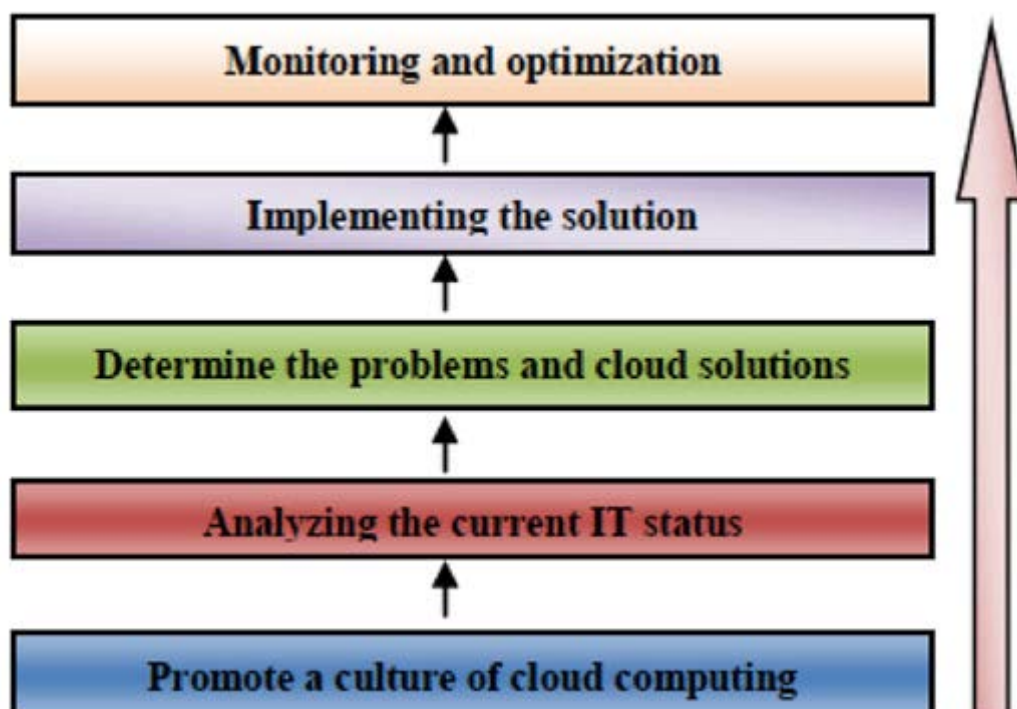
Appropriate data and applications are moved to the Cloud and if necessary also back to internally hosted operations. This is based on a continuous assessment of the appropriate use of Cloud technologies for particular purposes.

Successful transition



There is growing use of Cloud services by education departments and organisations. Centralised IT behavior is shifting to better match the needs of the learners and the agility and productivity Cloud services can provide,

Leaders in education also need to focus their efforts on strengthened ties to teaching and learning and to the needs of academic subject areas. This implies creating a culture of Cloud Computing among teaching staff.



Such a transition cannot occur overnight. Many activities should take place related to promoting a culture of cloud computing such as workshops, seminars, participating in conferences, training courses and contacting with experts.

The psychological and technical readiness to dealing with the Cloud needs to be reached.

Some possible techniques for overcoming staff resistance are: aligning use with the needs and goals of users; regular communication and training opportunities; creating a safe learning and teaching environment; ensuring the participation and involvement of all colleagues and forcing and coercion

Futures: Cognition Cloud

In order to ensure a sustainable Cloud Computing strategy, leaders and managers should be aware of future developments taking place. How might the classroom be transformed by the Cloud? What technologies do you need to look out for?

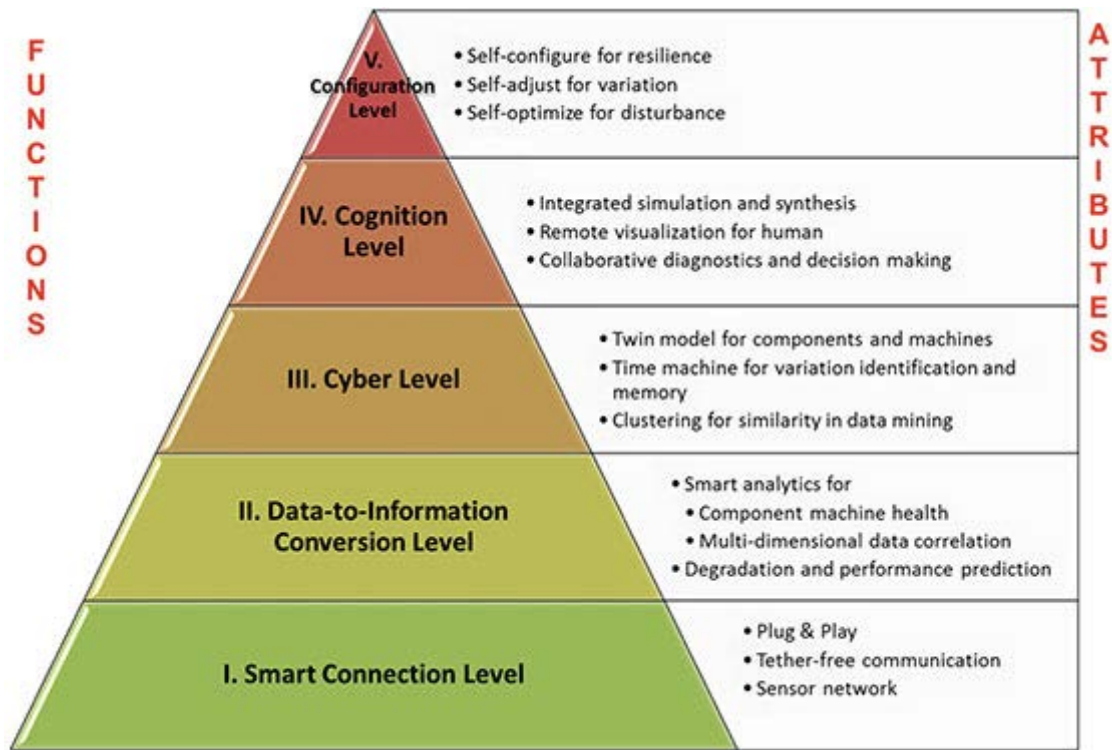
New School - 3 Ways Technology Will Transform the Clas..



New School - 3 Ways Technology Will Transform the Classroom

<https://youtu.be/y17I-hxFz1M>

In the future the connection between the Cloud and cognition is likely to increase and make use of data analytics and artificial intelligence for diagnosis and decision making about learning and teaching.



In education this would lead to personalisation of learning and the rise of the smart classroom.

Personalized Learning: 5 Future Technology Predictions ...

Personalized Experiential Learning <https://youtu.be/hTA5GyWamR0>

[See more](#)

What could the future of Cloud Computing offer? Here are some visions.

Cognitive and Cloud: Connecting the Future



Cognitive and Cloud: Connecting the Future (IBM) <https://youtu.be/VzCz6a3RWZs>

A Cognitive Cloud platform will make it possible to create and bring Cognitive Computing applications to the masses. Read more about [Cognitive Computing apps for all](#)

The Future of Cloud Computing: Amazon, Google, Micros...



The Future of Cloud Computing <https://youtu.be/qyZOasdE5PI>



Return to the guidelines

