



International Baccalaureate®  
Baccalauréat International  
Bachillerato Internacional

## RESEARCH SUMMARY

# Development of a transcript to record learner creativity and curiosity

Summary developed by the IB Research department based on a report prepared by:



Australian Council for Educational Research (ACER)

Study managed on behalf of the IB Research department  
by Dr Edlyn Chao

August 2022



 **JACOBS  
FOUNDATION**  
Our Promise to Youth

---

## Background

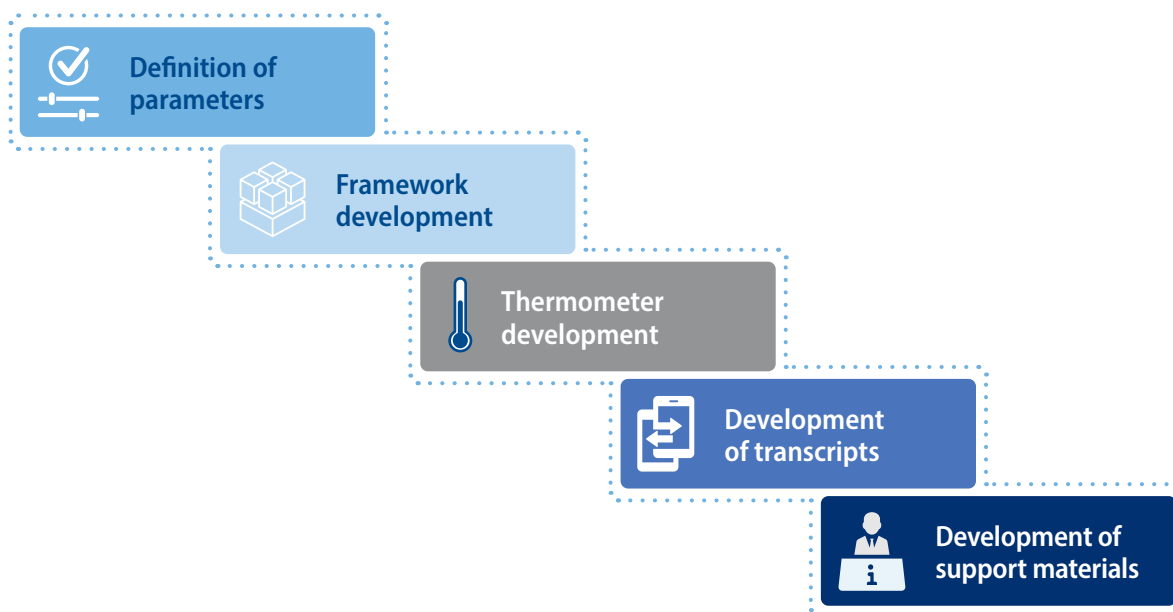
Funded with generous support by the Jacobs Foundation (JF), the ultimate goal of this project was to develop transcripts to track learner progress in the domains of creativity and curiosity. To support this overarching goal, the research team sought to define creativity and curiosity in language that would resonate with learners and teachers and that would be appropriate across numerous cultural settings. The result of the project is a series of prototype materials and resources that synthesize understandings of creativity and curiosity, specifically: literature reviews, frameworks, enabling environment summaries, reflective quizzes and transcripts. Further research is required to validate these resources before schools implement them with the aim of evidencing student growth in creativity and curiosity.

This project was conducted in parallel with a project by the Oxford University Centre for Educational Assessment on identifying promising practices for supporting curiosity and creativity in the classroom.

---

## Research design

The project included five discrete but interconnected phases, each of which involved consultation with relevant stakeholders.

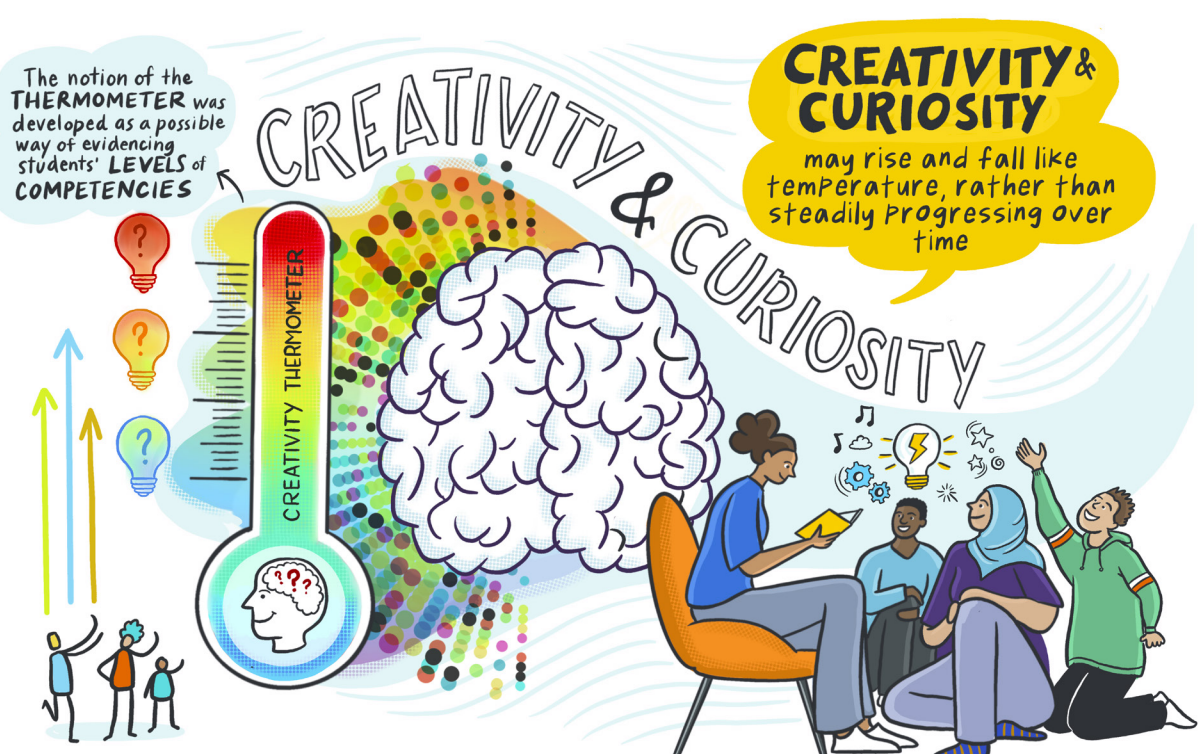


## Project aims and scope

Rather than a linear progression in which skills and knowledge evolve over time, it is hypothesized that competencies such as creativity and curiosity rise and fall in response to external stimuli and internal preferences. To reflect this potential rise and fall of creativity and curiosity, the research team used the **metaphor of a thermometer**. The value of a thermometer is that it is easily understood by both primary and secondary learners, and is also non-judgemental. Cold, cool, warm and hot are different, but none are “better” or “worse” than another.

The researchers also focused on the environment that schools and teachers provide for learners, and the extent to which this enables students to express their creativity or curiosity. Therefore, the researchers refer to a proposed “**enabling environment**” and use the **metaphor of fertility**. In “unfertile” growing environments, seeds are present in the soil but the environment is not right for them to flourish. This is intended to reflect the latent creativity and curiosity of learners whose learning environments or teachers do not provide a supportive environment in which to be creative and curious. The other three categories of an enabling environment suggest improvements in growing conditions so that the latent seeds can grow into stronger plants.

The importance of context is further reflected in the design of the transcripts to record learner creativity and curiosity. The transcripts focus on supporting learner agency, metacognition and reflection. Instead of judging and grading learners’ creativity and curiosity, this approach ensures that the diversity of expressions of creativity and curiosity by learners aged 3–19 years can be evidenced. This both enables feedback loops into ways to enhance creativity and curiosity and generates tangible records of accomplishment for learners to share.



---

## Key project outputs

The report provides a suite of resources that are included as appendices. While the resources have been revised with input from the International Baccalaureate (IB), JF and teachers through a series of consultations and surveys, these resources have not yet been trialled or validated and therefore are considered exploratory.

### Literature reviews

The literature reviews on the concepts of creativity and curiosity synthesize scholarly research and identify their implications for use in schools and classrooms (Appendices 1 and 2).

### Frameworks

The frameworks use insights from the literature reviews and turn them into definitions and constructs that are intended for educational settings (Appendices 3 and 4). Each construct is divided into dimensions and sub-dimensions to help situate creativity and curiosity in the types of activities that learners undertake in schools. Each framework also includes examples of how a sub-dimension might play out in a classroom and defines different levels of creativity and curiosity.

The report further converts the framework definitions of levels into resources that learners can refer to in class. Researchers termed these “thermometers”—a metaphor to explain the ways in which curiosity and creativity are hypothesized to change from “cold” to “hot” (Appendices 5 and 6).

### Enabling environment

Due to the suggested importance of context, the study considers the extent to which schools and teachers provide an enabling environment for learners to be creative or curious. The report presents these through the metaphor of a plant developing from a seed, to a seedling, to a healthy plant.

The scholarly literature indicates that some learners have traits that cause them to be naturally more or less creative or curious than others. Nevertheless, the researchers hypothesize that all learners can strengthen their innate tendencies when teachers and schools provide nurturing environments for this to occur.

The **enabling environment summaries** are designed to help teachers, programme coordinators and school leaders to reflect on the extent to which they enable creativity and curiosity in their schools and classrooms (Appendices 7 and 8).

Further, teachers are provided with **reflective quizzes** for creativity and curiosity (Appendices 11 and 12). These are designed to encourage reflection by individual teachers, or discussion among a group of teachers. They indicate ways in which simple changes in pedagogy might facilitate the growth of creativity or curiosity among learners.

## Transcripts

Finally, the research team created transcripts for each domain, which are designed to balance learner reflection and teacher validation (Appendices 9 and 10). The transcripts intend to provide learners with agency over which piece of work they choose to highlight and the language, taken from the thermometers, to explain what they think they have been able to demonstrate. The transcripts also enable learners to reflect on a series of expressions of creativity and curiosity, and to identify insights into their own preferences that they might use to strengthen their approach to learning.

## Consultations

The research team conducted several rounds of consultations with numerous stakeholders for this project. The report provides details from the first round of consultations on the frameworks (Appendix 13) and the second round on the support materials (Appendix 14), and also includes the questionnaires that the researchers used.





---

## Limitations and next steps

The level of engagement of schools and teachers was negatively impacted by the COVID-19 pandemic. This meant that the research team was not able to have as many teachers try out the materials as was originally planned.

**Additionally, validating these resources on a large scale was not included in the scope of this study and will be an important next step.**

---

This summary was developed by the IB Research department. A copy of the full report is available at [www.ibo.org/en/research/](http://www.ibo.org/en/research/). For more information on this study or other IB research, please email [research@ibo.org](mailto:research@ibo.org).

To cite the full report, please use the following: ACER. (2022). *Development of a transcript for creativity and curiosity*. International Baccalaureate Organization.